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**THE INFLUENCE OF SOCIAL WORK IN DEVELOPING AN
INFORMATION AND COMMUNICATION TECHNOLOGY –
using the example of the Project TILIA – Parent Support Application**

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ABSTRACT

The product development of TILIA – Parent Support Application is a project made in the learning program DevLAB, based on LAB Studio Model (LSM) and offered by the Oulu University of Applied Science in Finland. The mobile application TILIA is created by an interdisciplinary team of students, supported by a group of teachers, the cooperation partner Nuorten Ystävät and some parents. The goal of the product is to support parents with their challenging everyday situations when raising their children and stay in regular contact with professionals from organisations. Another goal of this paper is the personal learning goals during this product development process as a future professional in social work. The combination between social work and Information and Communication Technology is also analysed.

TILIA – Parent Support Application was developed within the frame conditions of LMS and the theoretical background of Design Thinking combined with input of social worker and parents to understand the need of the target group. Within research and empathizing with the target group the team decided to build a mobile application with following functions: Calm Down Button – for times where interaction is needed to keep the inner balance, Mood Diary – documentation of daily feelings in certain situations, Tips and Tools – Tips and different methods from specialists. The unique function of the product is that the “Mood Diary” and the “Tips and Tools” can be shared with professionals from organisations to get fast and personalized help but also to stay in contact for better support.

The result was a prototype of the application within some functions to show how the application could work. As a conclusion it can be said that parents and professionals are interested to be part of a development process. Professionals such as social worker should be part of intervention and creation and see this as an additional working field where they have skills that should be used in this area. Also the personal goals were reached within some lectures and teamwork experience.

Keywords:

Social Sciences, Environment and Public Health, Health Care Facilities, Manpower, and Services

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1 INTRODUCTION

This paper shows the development process of creating a prototype mobile application during four month in Oulu, Finland, within a LAB Studio Model and the framework of Design Thinking. The application is supposed to support parents with their challenging everyday situations by raising their children but also to act as a working tool for professionals such as social worker.

First of all the goals and aims of the thesis are defined. These are divided into different parts such as the goals for the product and the personal learning goals during this process. After setting the goals the theoretical definition part will clarify the meaning and use of Information and Communication Technology (ICT) and shows a short historical review. Then the connection between the trend of the “Generation App” and the meaning of ICT in social work will be discussed. Before explaining the development process of the application, the context will be described. Therefore the LAB Studio Model, DevLAB and Design Thinking are main parts of this chapter.

Based on the previous theoretical part and the context the process will be described from the beginning, such as finding the problem, till the end – presenting the prototype. In this part the facts and each step is in focus in order to understand the development. Referring to the experience in being part of the process and researching the theoretical background the conclusion will be concentrated on the chapter of goals and aims. My own opinion and thoughts that came up in this four month but also during writing this paper will be placed in the discussion.

2 GOALS AND AIMS

The product that was developed is meant to support parents in their challenging everyday situation with the possibility to be in contact with professionals from social organizations to get personalized help. The product should be in first case beneficial but also user friendly and appealing for parents and organisations. The benefit for organisations, in this case the customer of the product, is to create a tool to stay in regular contact with clients but still save time to make work more efficient. The mobile application is a tool for social worker and other professionals from social organizations to support families in a quick and direct way, support documentation of client work and help the organization to be more cost efficient. Further on the mobile application makes social service easier to reach for people living in rural areas. Also the society should benefit from the product by seeing it as a prevention tool. The application should prevent parents from getting bigger problems and intervene already in difficulties before problems get too big.

Based on research and cooperation with parents and organisations we develop a mobile application that is useful and has quality criteria such as all parents can use the tool. There is no target-group excluded. We design a mobile application that includes three steps for support. In the first place it is a helping tool to give support immediately. In the next step it visualizes the problems but also the good experiences and in the third step it gives tips and tools to change the routine.

My personal learning goals are divided into three parts: As a future professional social worker my aim is to experience teamwork with different professions. It is common to be part of an interdisciplinary team and I also want to learn leading skills through “learning by doing”. As a developer and creator my goal is to learn about communication, responsibility and about disciplinary knowledge like creativity, business, marketing, programming and pitching.

To compare these two goals my personal aim is to find out how ICT can be created as a working tool for social work. I want to reflect that social worker can be an active and

useful part of a development process and have important skills and knowledge that helps creating successful interventions.

3 INFORMATION COMMUNICATION TECHNOLOGY

Information and Communication Technology (ICT) places a greater focus on communication technologies compared to information technologies. It includes wireless networks, the internet, cell phones, apps, social network websites and many other communication mediums. ICT connects people from all over the world in real-time and creates a “global village”. That’s the reason why “ICT is often studied in the context of how modern communication technologies affect society” (TechTerms 2010).

ICT has both positive and negative impacts on human society and individuals, as there are benefits and difficulties with the modern communication. This is not a new perception however Everett M. Rogers, author of the book “communication technology”, was suspicious about the long-time effects already. Rogers feels “that the interactive communication technologies of the 1980s are markedly different from their predecessors and that the nature of human communication is thus altered in very profound ways” (Rogers 1986: 24).

Not only does society change within the new technologies, but ICTs itself transform. There were different technologies for communication and they changed all the time. It is very difficult to forecast any ICTs. In history, it stands out that new communication technologies are constantly changing, and one can never tell what the future technology will look like: “There is an important point here for the new communication technologies of today: They may turn out quite differently tomorrow than what we presently expect” (Rogers 1986: 24).

Based on history and for simplification, human communication can be divided into four areas: writing, printing, telecommunication and interactive communication. For this paper the last part is most relevant and will be focused on more closely. But even if there will be a specification on interactive mass communication, it is necessary to keep in mind that “... the history of communication is the story of “more”. Each new medium may change the function of previous media, but they do not disappear” (Rogers 1986: 26).

3.1 Mass communication

In the 21 century, an average person could not imagine going through a day without using some form of mass communication tools such as books, newspapers, radio, television and the internet. It is routinely and continuously present to people all over the world. We get flooded by words, images, information, ideas, events, films, television programmes, music, opinions, memories, entertainment and the media industries forms the population. Based on Thompson (1991) mass communication goes back to the fifteenth century when Gutenberg's printing press was starting to produce multiple copies of texts. From then there was a radical transformation until now, that went together with the industrial capitalism and formed the modern culture. (Thompson 1991: 127.)

The world is facing a quick growth of communication technologies and also a widespread use of them. The technology has to develop: faster, lighter, increasing number of available functions and so on, to keep up with the speed of globalisation. "Communication is possible at any distance, from any place, and in any weather conditions. (...) the world is beginning to shrink and there are no inaccessible places" (Bilinski: 255). It is important to realize that we are all part of this unstoppable development. Based on the survey "Mobiles Österreich – Der Mobile Communications Report 2015" 86 percent of the Austrian population use smartphones, 44 percent already have a tablet of which 39 percent use it daily. (MMA 2015: 39.)

3.2 Generation App

The "Generation App" is a definition from Howard Gardner and Katie Davis who analysed the habits and the connection between youth and technology. Gardner is a professor at Harvard University and Davis is assistant professor at the University of Washington. In their book "The App Generation: How Today's youth Navigate Identity, Intimacy and Imagination in a Digital World" they present the result of their study that last over years. Mobile applications are designed for specific tasks and change the way people are thinking. That comes because apps are providing or promising easy and fast answers to any question and problem. The critic of this lifestyle is that this generation is

also hiding deep-seated anxiety and isolation. Social Media gets more important and the value of family, friendships and relationships is getting less important. But even if this is a trend, the request of new apps can be seen and it is necessary to find a way to make applications productive, creative and constructive. (Xue 2013.)

Related to the study of Gardner and Davis it is interesting to show that there are more than 90 percent of mobile phone users are downloading apps from the app-store in Austria. The average person has around 25 apps are installed on a smartphone. (MMA 2015: 62.)

There will always be an app for each problem. People who grew up with this security can imagine the new security of solving problems as easy as downloading an app. (Marxer 2010: 17.)

But there is also a great benefit by using apps, especially in health sector. There are more than 165.000 apps related to the health conditions available. A study shows that they may not help in a common way but within the placebo effect. This happens without any direct therapeutic intervention but with the high level of expectation and trust. The results show that mobile apps can reduce symptoms and might change their beliefs about their medications. This study serves a new side of innovating new apps for new areas in health and social care. It opens a new market and shows that also this sector has to be open minded for mobile intervention tools. (Torous, Firth 2016: 100-103.)

3.3 ICT in Social Work

For understanding the context following is the international definition about social work, based on the International Federation of Social Work and the International Association of Schools of Social Work the social work profession “promotes social change, problem solving in human relationships and the empowerment and liberation of people to enhance well-being. Utilizing theories of human behaviour and social systems, social work intervenes at the points where people interact with their environments. Principles of human rights and social justice are fundamental to social work” (USAID 2008: ix). This definition was published in July 2014 and may be amplified at national or regional levels (ifsw 2014).

As already in previous chapters shown Information and Communication Technology has shaped the global community and also the field of social work has recognized that ICT is an important key part of this profession. Therefore the National Association of Social Workers and the Association of Social Work Boards have published in 2005 the “NASW & ASWB Standards for Technology and Social Work Practice”. This paper should be used as a guide for professionals and shows that technology and the Code of Ethics for Social Work are compatible. The importance of ICT using as a tool in social work comes more and more clear. (Perron, Tylor, Glass, Margerum-Leys 2010: 2-4). The role of technology shapes the life of the clients and also the profession of social work and therefore “social workers (also) need ICT competencies in order to effectively lead different types of social change initiatives or collaborate with professionals of other disciplines who are using ICTs as part of existing strategies” (Perron, Tylor, Glass, Margerum-Leys 2010: 1).

ICT is useful either as communication tool, for securing resources or gathering information and has a wide scope for using with benefits. Also the life of clients has to be understood. For example people have online relationships and friends where only a virtual connection is made and social worker have to understand those. “...the social work curricula emphasize the importance and development of in-person relationships, while little attention is given to understanding the role of online relationships and computer-mediated relationships” (Perron, Tylor, Glass, Margerum-Leys 2010: 5). Also it is suggested that social workers should deliver health services within ICT to reach also clients in highly rural areas, especial in times of personal and financial crisis. The only requirement is that clients and social workers have access to internet and a computer. Based on a survey from the PiceWaterHouseCoopers Health Research Institute 2009 it can be said that around half of the people would use online consultations if there would be this service available. The trend also shows that clients search in the internet for answers before conducting other support. (Perron, Tylor, Glass, Margerum-Leys 2010: 6.)

There exist already some mobile applications for the use of social worker and their clients. Lutz Siemer, a German lecturer at Saxion University of Applied Sciences,

collects on the webpage <https://mobilesocialwork.wordpress.com> useful and existing mobile applications and also publishes a magazine “to stay up to date with social work related aspects of mobile technology and social media” (Siemer 2012). Therefore also the education of social worker has to be developed in this direction, “in order to design assignments, activities and projects that reflect the real-world use of ICTs” (Perron, Tylor, Glass, Margerum-Leys 2010: 8).

4 PRODUCT DEVELOPMENT: CONTEXT

During my studies abroad in Oulu, Finland, I was involved in an education model called LAB Studio Model and further on in DevLAB where a group of international and interdisciplinary students were solving problems by creating solutions and building prototypes within four months. In this chapter there will be a description about the LAB Studio Model, established at the Oulu University of Applied Sciences in Finland. Afterwards there will be an overview about DevLAB who is working with the method of Design Thinking. (OAMK 2015.)

4.1 Oamk LAB Studio Model

The Oamk LABs, an interdisciplinary project based studio model, is offered at Oulu University of Applied Science (OUAS) since 2012 for students from different departments, international exchange students and for people from the Open University. It all started with Oulu Game LAB which focused on building prototypes, products and start-ups within the aim to reach the global game industry. Now the Oamk LABs includes three different Studio Model education settings such as GameLAB, DevLAB and EduLAB. (Heikkinen 2014: 13.) “In general, the LSM can be defined as a business pre-incubator, created to produce promising teams with solid and proven potential for creating their own new business” (Heikkinen, Seppänen, Isokangas 2015).

The LAB Studio Model trains competent new professionals in an active and industry focused way but there is no common definition for this learning strategy. Christopher N. Bull (2013) defined the Studio Model learning system based on his research and experiences where he named following important categories: physical environment, facilitation of studio, modes of education, critique, culture, individual’s characteristics, inspiration, collaboration and digital technology (Brown 2013: 1063). Based on this definition the Oamk LAB Studio Model made some suggestions that are shown in *TABLE 1* for improvement of these parameters.

TABLE 1: Main categories influencing Oamk LAB Studio Model (Heikkinen, Stevenson 2015: 8)

CATEGORIES	DESCRIPTION OF CHARACTERISTICS OF LSM
<u>Physical environment:</u>	located in city centre and open space like in a company, controlled and individualized by students and participants
<u>Facilitation of studio:</u>	rules are created by students, kitchen is available, 24 hours access, small size of teams and studio belongs to students
<u>Modes of education:</u>	“learning by doing” focused on research and development, peer-learning, teachers step out of their teaching routine and start to coach, teachers transform to a consultant of the project without having a correct answer in mind.
<u>Awareness:</u>	visualization by prototyping, events and showing progress
<u>Critique:</u>	peer-feedback, industry-feedback, constructive and informal feedback, discussion about development
<u>Culture and Inspiration:</u>	work ethic, care and trust, permission to fail, tolerance of ideas
<u>Collaboration:</u>	multidisciplinary, internationality, multi-generational, leadership, team work
<u>Digital technology:</u>	essential and enhances social interaction

Based on these characteristics the LAB Studio Model includes two 30 ECTS programs who lead through the demo path, creating a demonstration of a solution, and the project path, creating a product or service, till the chance to open a start-up. *FIGURE 1* shows how the LAB Studio Model is constructed. As I was doing the demo LAB in winter 2015 for 30 ECTS this text will only describe the steps in this part that went on for four month in full time, 40 hours a week.

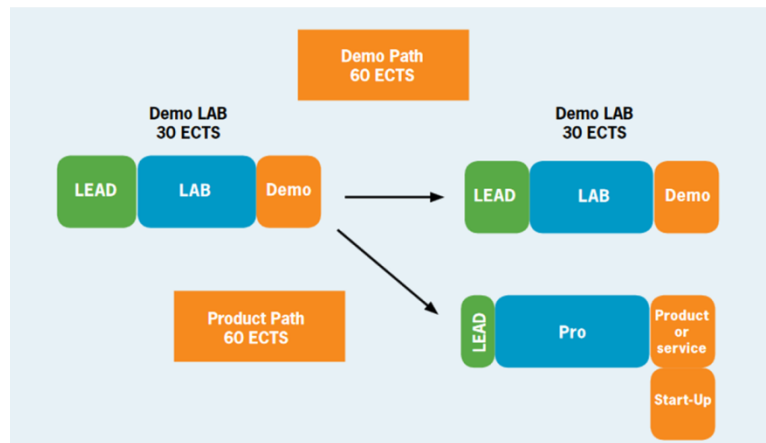


FIGURE 1: LAB model paths descriptions (Heikkinen 2014: 7)

“The concept development phase and project phase are called LEAD and LAB, respectively. The LEAD phase typically lasts about a month (5 ECT) while the LAB phase can take from one to three months (10 to 25 ECTS), depending on the desired result” (Heikkinen 2014: 11).

In LEAD phase participants are concentrating on the concept development that includes lectures and coaching. The goal is to come from an idea to a product. A few ideas will survive and the slogan is “fail fast, learn fast” After this part the demo development will start with the LAB phase where interdisciplinary teams start with the projects including the possibility of coaching and lectures. At the end of the path the product demo will be demonstrated to judges who are from different areas such as industry professionals. These judges decide which project will be further developed, based on the viability of solution and the business possibility. These presentations are called Gate 1-3 and are used to proof the quality of the outcome and learn how to use constructive critique. (Heikkinen 2014: 11.) The project ideas are chosen by LAB masters, coaches, partners, from organisations and companies. “Ideas can be half-finished products or services whereas solution requests detail problems observed by customers, to which methods, services or products can be developed as solutions within the projects” (Heikkinen 2014: 12). At the beginning of the program there are a few ideas which are dedicated to small teams. Not every team is going to the stage of demo, but the teams who go on are getting new team members. As already previously mentioned the selection of the projects who continue is made by the professional judge. (Heikkinen 2014: 15.) This

special learning model wants to reach that participants become professionals in various fields and understand one another so they can achieve results together.

The LAB studio model is used in Oamk LABs three different areas: GameLAB (building prototypes, products and then start-ups targeting the global game industry), DevLAB (developing demos in different industries such as health/wellness or energy/environment) and EduLAB (focusing on global education technology) (OAMK 2015).

4.2 DevLAB

During winter semester 2015 in DevLAB projects had to pass three Gates, events where professionals from different areas act as judges and select the ideas who are continuing. Gate 1 was after 4 weeks. The goal for Gate 1 was to research about the given problem and to get an overview about the context. Understanding about the needs, the customer and the business opportunity and finding some answers for these target groups. There had to be some interesting points in each part of them. The results had to be presented in front of a professional audience who decided about the projects where the problem seemed to be worth solving and gave some constructive feedback. The next 4 weeks the teams were working on more details and had to present these and showed possible solutions to solve the dilemma. After Gate 2 some teams continued with new team members and started to work on a prototype, a business and marketing plan and the context. The prototype and the whole context work like the marketing and business plan had to be presented at Gate 3 at the end of the program.

4.3 Design Thinking

In fall 2015 DevLAB was working with the method of Design Thinking based on the model from the Institute of Design at Stanford formed by Tim Brown¹. “It is a discipline that uses the designer’s sensibility and methods to match people’s needs with what is technologically feasible and what a viable business strategy can convert into

¹ Tim Brown is the CEO and president of IDEO, an innovation and design firm with headquarters in California.

customer value and market opportunity” (Brown 2008: 2). That means that the main requirements of Brown for creating a successful design have to be technically feasible, human-centered approach and make business sense (Roger 2009: 65). Brown believes that great ideas don’t pop fully formed out of brilliant minds but is the result of hard work from a multidiscipline team during a creative design process within three spaces: Inspiration, Ideation and Implementation (Brown 2008: 4). Later on the process developed into five different stages while creating something new. In *FIGURE 2* shows the way to go during innovation and underneath each mode will be shortly explained.

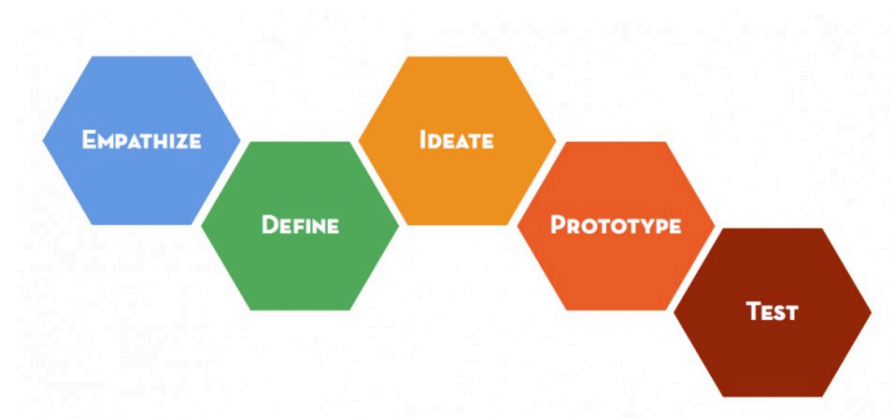


FIGURE 2: Stages for creation (Institute of Design at Stanford 2013: 3)

4.3.1 Empathize mode

At the beginning of the thinking about the problem it is necessary to understand the people for whom the design is for. The idea is to meet the desires and needs of users. (Brown 2008: 2.) This happens in three steps:

Observe: watching people / the potential users in their natural environment, trying to understand their acting, what they do and say during their experiences. Therefore it is important to filter out the information that’s needed for the project. The best way to do so is to see things “with a fresh set of eyes”.

Engage: getting in touch with users by interviewing them about their thinking and values. The stories they tell are strong indicators of their beliefs and the way they see the world. Identify the right users and discover their emotions by talking to them.

Immerse: personal experience in the field of the potential users is very helpful, if not necessary, for a better understanding of the situations users are in and for which you are designing. (Institute of Design at Stanford 2013:1.)

4.3.2 Define Mode

Reframe the point of view (POV) by using the knowledge collected at the empathize mode. It is not only defining the problem, it is more an actionable design challenge. This should be reflected not only at the beginning but during the process to be truly generative. Some new insights might come up through the design work and has influence to the definition of the problem. Fear of changing the point of view is not an option. For example a good point of view inspires the team, frames the problem, provides a reference for evaluating competing ideas, and saves you from impossible solution concepts, revisit and reform as you learn by doing. (Institute of Design at Stanford 2013: 2.)

4.3.3 Ideate mode

In this stage it is recommended to go beyond obvious solutions and create a large quantity of ideas. Not focusing but flaring. The main task is to think about any possibility to solve the problem. The goal is to explore a wide solution space for building prototypes to test with users. This helps to spot the innovation potential of the solution and uses the whole potential of the team to cover unexpected areas. (Institute of Design at Stanford 2013: 3.)

4.3.4 Prototype Mode

After collecting a lot of solution the stage of prototyping has arrived. A prototype can be a role-play activity, an object, a storyboard, a post-it-wall, or just anything that takes a physical form. Prototyping doesn't have to be time consuming and expensive, the aim is to describe the characteristics of the solution so the audience can be more precise about the accomplishment. (Brown 2008: 3.) The prototype has to be developed all the time, especially at an early stage of the process where big changes can happen, it should

be understood as a learning process. The goal is to show how the solution should/ could work and deepen the understanding of users' needs (empathy). The purpose is to explore multiple solution options and test these with users to get new inspiration and inspire others by showing the vision. Like in previous modes the target is to learn, solve disagreements, start a conversation and fail quickly but cheaply. In the quality of prototyping it shows how well the team is cooperating and if the team shares the same point of view. (Institute of Design at Stanford 2013: 4.)

4.3.5 Test mode

This mode is closely compared to the prototype mode. Sometimes it is necessary to go back to reframe the problem correctly. The point of view should be clarified at any stage. "Prototype as if you know you're right, but test as if you know you're wrong" (Institute of Design at Stanford 2013:5).

5 PRODUCT DEVELOPMENT: TILIA – Parent Support Application

As I was an included part of the product process I decided to write this chapter in a personal form by using personal pronoun. All information I collected is based on my personal notes and memos but also on tools we used as a team like Google Drive, Facebook Messenger, Trello, Outlook Calendar and Microsoft Office365.

5.1 The Problem

At the beginning all 12 participants were split into teams of two. I was paired up with a girl called Jenni, from Finland. Jenni studies Business Information Technology. After getting to know each other we got introduced to our problem:

Parental guidance solution that helps parents to recognize, accept and in a case of conflicting emotion to learn how to anticipate better one's own feelings by developing self-reflection capability. Solution could also e.g. help parents to recognize better working ways to react in a problematic situation with their children. Target is to have a type of parenthood solution that parents can relay in cases of emergency and also use to educate them if they are looking for more knowledge and tools for their parental role and responsibilities.

The task we were given was, that Jenni and I should think about the problem and possible solutions in different ways, getting familiar with the topic and the context. The given instruction and guidance was vague because the coaches didn't want to lead us in a pre-assembled direction. As already pictured in the LAB Studio Model parameters it is important for teacher to coach our ideas but not giving us "right" answers that we have to study. For this process we used different methods like picturing the problem from three different views such as the children's view, parents view and society's view. In *TABLE 2* the different ways of thinking about the problem can be seen. This is based on the method "Assume a Beginner's Mindset" that is part of the Design Thinking theory. The aim of using this method is not to judge, question everything, being truly curious, listen and find patterns. (Institute of Design at Stanford 2013: 6.)

TABLE 2: Different views of the problem – brainstorming

Children's view	Parents view	Society's view
<ul style="list-style-type: none"> - What did I do wrong? - Parents never listen! - I get afraid if my parents get loud! - I want attention from my parents! - I get what I want if I scream! - Why should I do what parents tell me? - Rules are no fun! - I don't understand the rules! - I am lonely! - My parents don't love me because they hurt me! 	<ul style="list-style-type: none"> - What did I do wrong? - My child hates me! - My child is doing it with bad intention! - I am exhausted! - It can't be my child! - This bad habit of the child is from my partner! - HELP - I have no idea what my child wants! - My child isn't listening! - My child wouldn't understand it anyway! - Everyone is having a perfect family – I don't! - Why is my child behaving like this only at my place? - I want to be a perfect parent! - How can I get out of this situation because people are watching! 	<ul style="list-style-type: none"> - Children need rules! - A lack of rules makes criminal grownups! - Why do people get children if they can't raise them? - A quiet child is a good child! - It is your own business if you are exhausted and tired! - Business of the family! - It is embarrassing if parents don't come along with their kids by themselves.

Further on, to guide our efforts, we were presented a structure for product concept creation, as in *FIGURE 3* can be seen. To build up a successful solution it is needed to

understand that these five areas are interconnected and have to be answered. The need defines the problem and is formed by industry companies, organisations and environment. The solution is the answer to the need and can be a product, service or method that is supported by the business opportunity. The client, potential customer, and the user can be the same person but don't have to. These interrelated areas are surrounded by the context, also seen as the environment where all parties are acting together. (Heikkinen, Isokangas, Seppänen 2015: 55.)

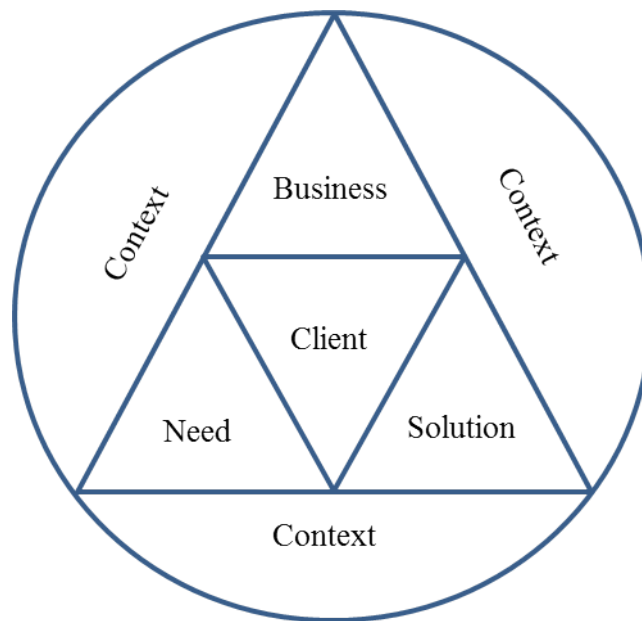


FIGURE 3: Content areas used in LAB Studio Model (Heikkinen, Isokangas, Seppänen 2015: 55)

5.2 Empathize

The first step was finding the client and the need. Jenni and I tried to open our thinking to any possibility. Main questions we were asking ourselves were: Whom should we help? Who needs help? What solution exists already? What would be useful? What do we think is true about the given problem? Why should parents get told what to do? Why do parents need support by raising their kids? To sum these questions up: “Who needs help with which problem?”

Soon we defined parents as user for our solution. We thought that parents need help so we tried to think like them and came up with some possible problems: lack of rules, too

little time for kids, communication between parents, unsure what to do, partnership problems, no social network, no support in daily life.

To get more details about the life of parents and their environment we created three stakeholder maps for different target groups, visualized in *FIGURE 4-6*. Stakeholder mapping is a method to visualize the environment of an organisation, person or company and pictures the affect and interest in them. Therefore you first collect all stakeholders and then divide them into internal stakeholders such as family or friends and external stakeholders like the government, media or TV. The aim of this theory is to realise that every stakeholder affects the environment and is affected by the environment at the same time. (Professional Academy.)



FIGURE 4: Stakeholder-Map: Parents with Kids aged 0-3

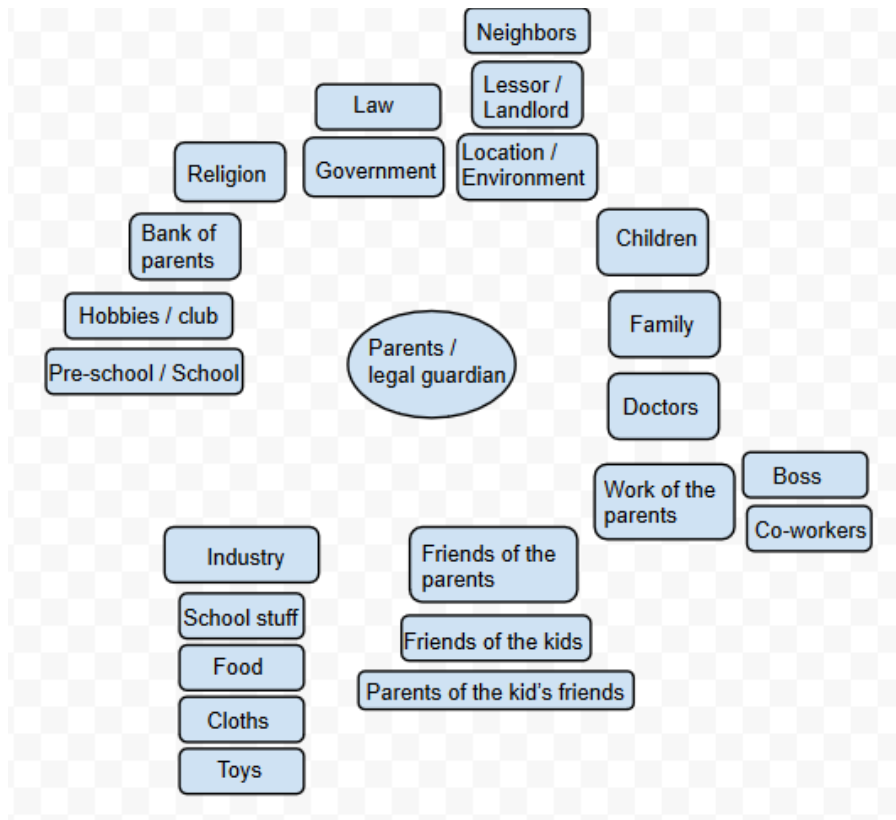


FIGURE 5: Stakeholder-Map: Parents with Kids aged 6-9

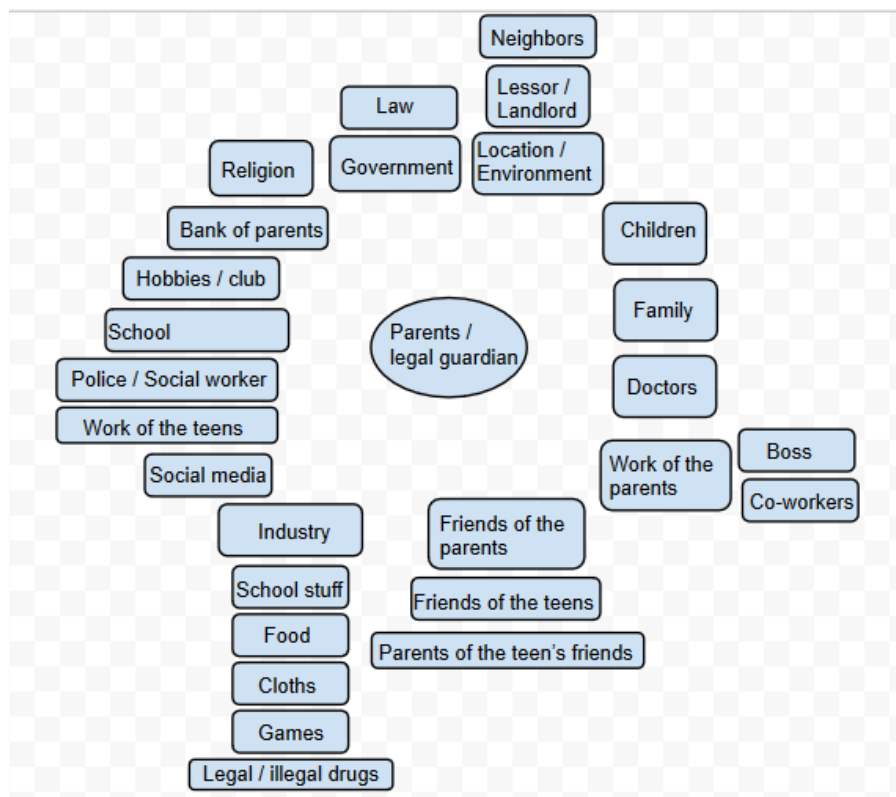


FIGURE 6: Stakeholder-Map: Parents with teens

FIGURE 4-6 show that it is very important to define the target group because the environment and resources are changing and also the problems are different. It all depends on the age of the children.

In the next step Jenni and I got in touch with parents directly. Therefore we prepared some questions, went on the street and asked 4 people about parenthood. The questions were focused on the main points we wanted to know – the problem and the solution - as *FIGURE 7* shows. Our aim while creating the questions was to keep these open and not implement already the answers we assumed. The answers were clear: There is a huge lacks of time, parents feel guilty, don't have self-confidence and no one to talk about problems.

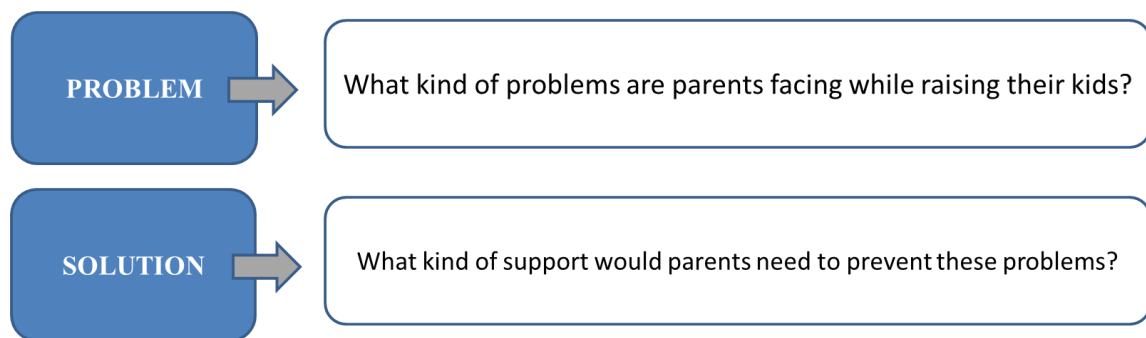


FIGURE 7: Questionnaire for parents

After the survey we met the organisation Nuorten Ystävät to talk about their thoughts. Nuorten Ystävät was our cooperation organisation from the beginning. Nuorten Ystävät is Finnish and means “Friends of the Young”. It is a youth welfare service where different professions such as social worker and pedagogics are working together to support parents and children. The meeting was in their office and Jenni and I got accompanied from one of our coaches. During this meeting we talked about challenging situations of parents and what they need. *TABLE 3* shows the keynotes about the meeting.

TABLE 3: Keynotes: Meeting with Nuorten Ystävät, 7.9.2015

Parents are frustrated and stressed with the same situation over and over again
Parents face aggression and challenging behaviours of their children
Violence is a huge topic
Parents do have problems with money
Parents have hard times by setting up rules and prevent difficulties
Parents have problem by taking their parenting role
Parents are facing challenging situations every day
All parents are affected of daily challenges
It is needed to have a solution for all parents, not only for one particular age of kids

All these mentioned problems helped us to get an expression of our users' needs. Nuorten Ystävät brought out that they would be happy to get a tool for parents and not for their kids because there are already some tools for them but not for parents. This supported us to define the problem.

5.3 Define

In this mode Jenni and I defined the problem we wanted to create a solution for: "Parents are facing challenging situations every day by raising their kids. They need support by setting up rules, taking a parenting role and controlling their emotions such as frustration, stress, helplessness and aggression." By choosing this problem we included all parents, no matter what age their children are and what kind of problem they have. Making this decision was a big step because we didn't want to exclude any particular target group. The process developing and finding the solution made this decision harder than before. Creating a support-tool where all parents can see themselves in seemed almost impossible.

After finding the users we selected the clients and possibilities where the money could come from. *FIGURE 8* expresses the involved parties of creating a solution. In the following chapters each party is explained in detail.



FIGURE 8: Involved parties of solution

5.3.1 Parents

Based on Statistics Finland (2015) there are 574.000 families with underage children. In total there are around one million children in Finland and about 100.000 children in the area of Oulu (Mannerheimin Lastensuojeluliitto 2013). FIGURE 9 shows that the number of families in total, including families without children has grown slightly but the number of families with underage kids has decreased.

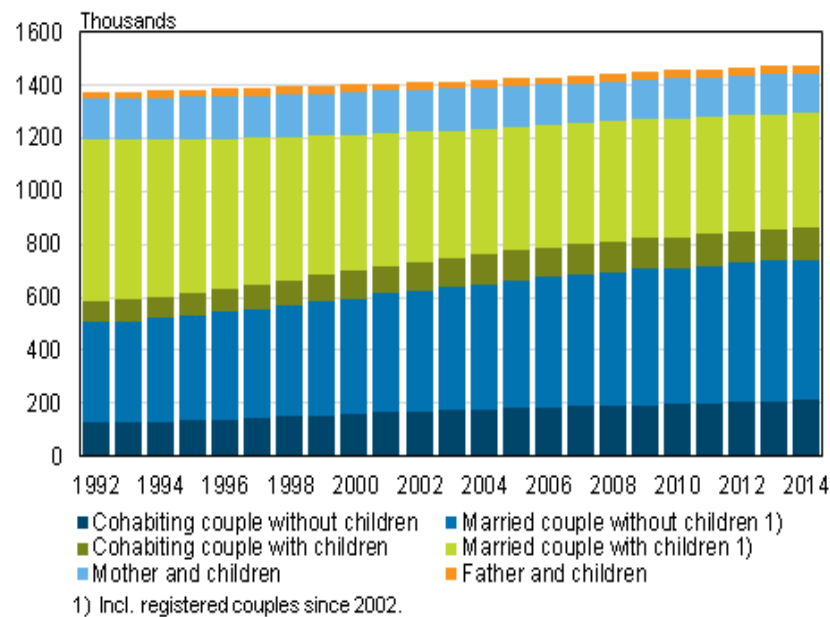


FIGURE 9: Number of families in Finland (Statistics Finland 2015)

Compared to the previous FIGURES 8 and 9 the social security institution in Finland, Kela, recognizes that the number of beneficiaries has increased alarmingly since the last decade. Over 15.000 under 16 year olds were showing mental and behaviour disorder in the 2012. Twelve years before Kela paid disability benefit to around 11.000 children per year. That makes nearly half of all the beneficiaries Kela is paying and costs around

33.5 million euros every year. Based on the studies of the Institute for Health and Welfare adults play a key role in children's live and are aware of their wellbeing. (Yle Uutiset 2013.) "Professional help or medication cannot replace adults simply being there for the child. (...) children need people around to support them" (Yle Uutiset 2013).

For visualizing this outcome *FIGURE 10* shows that the number of children placed outside their home is also rising constantly in Finland.

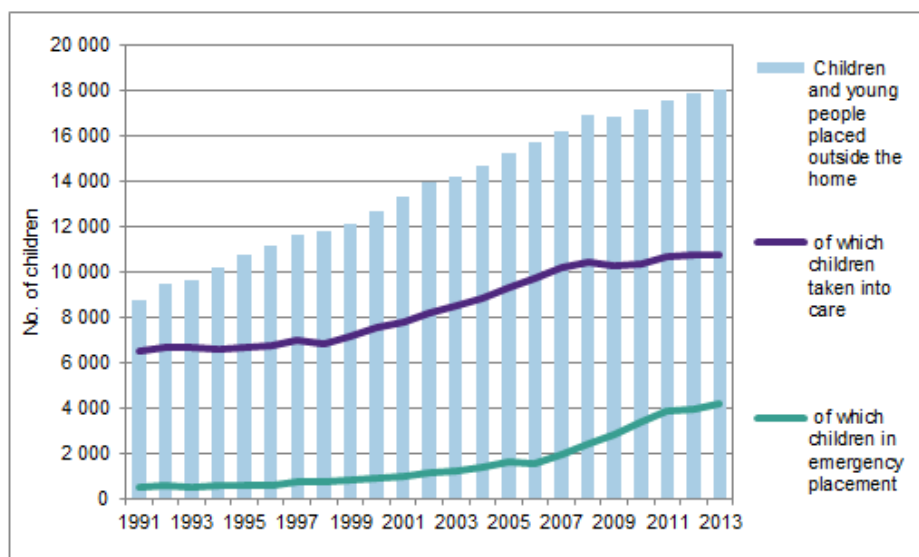


FIGURE 10: Numbers of children placed outside their home – Finland (Terveyden ja hyvinvoinnin laitos 2016)

This trend is not only shocking but also expensive. The cost of placing children outside the family's home in 2010 amounted around 620 million euros, compared to 2006 costs amounted to 430 million euros. These are 50 million euros per year more which the government is spending. (Terveyden ja hyvinvoinnin laitos 2016.)

5.3.2 Organisations

As an example, Nuorten Ystävät was very interested in cooperating with our team and that is why they supported our work from the beginning on. They offered important information and mentioned that it would be great if the solution could also facilitate

their daily work and save time by documentation. The organisation also cares about the families and can see that parents are searching for help when problems are already very big. They want to reach and support more families with small every day challenges so their problems don't get out of control. It would also be possible to help parents who can't come regularly to an appointment for example because they have a regular job or live far away. The organisation would like to have a working tool for prevention.

As a result of research we found out that there is a certain amount of organisations working with families and parent. During this time we contacted other organisations where the Tampere Parent's Association was very interested in the future product.

5.3.3 Government

We wanted to make a tool that prevents big problems such as placing children outside their home. With this prevention the government supports families and can invest their money more efficient.

In Finland people get a gift for giving birth to children, it is called Maternity Package and the government donates around 40.000 packages a year. Our idea was, to make our solution as a part of the Maternity Package so every Finnish family gets the solution for free. The Public Health Service of Finland should also be one of our cooperation partners. Families are their clients and the solution will be preventive work.

Additional to that we researched an example of successful support for social project and found a program based in Turku, Finland: It shows that there is an example of support and foundation from the government to a social project in Finland. The Academy of Finland created together with the Canadian Institutes of Health Research an operating model called Voimaperheet – Strength Families. The Goal was to identify children's behaviour problems including the use of the Internet and the phone. The program was built by two professors and started in 2010 within pilot study located in southwestern towns in Finland such as Turku, Raisio, Kaarina and Naantali clinics. It was only for selected needy families possible to join the program and for the participants it was free of charge.

The program was funded by the Academy of Finland, Southwest Finland Health Care District and the Canadian Institutes of Health Research. Additional to that mental health non-profit foundations were involved as well. (Turun yliopisto – University of Turku 2016.)

5.3.4 Overview – Triangle

The Empathize and Define Mode was happening within three weeks. Jenni and I presented the results to a jury in the learning rooms. The original presentation and handout from Gate 1 can be found as *APPENDIX 1 and 2*. To sum the results of the empathize mode up we presented the Triangle, see *FIGURE 11*, to the judges and concentrated primary on the business facts, the need and the clients. The solution was left out of the process till then.

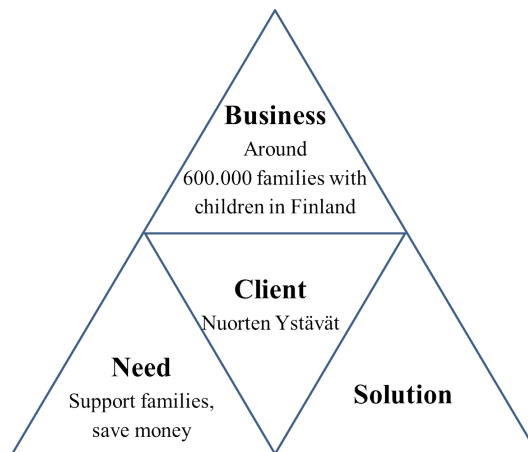


FIGURE 11: Triangle – Gate 1: 16.9.2015

The jury found the idea viable and important to solve so that our team went through Gate 1 and was able to continue. It was planned to get a new team member, but the person quit the program and so Jenni and I were still a team of two. The team of the two of us was stable and productive but we had a challenging time after these past six weeks working together not to get a new creative head to our group. Right after Gate 1 we didn't come up with new ideas, so we started to talk to other teams about our problem.

5.4 Ideate

As a next step Jenni and I were thinking within a mind map of any solution we could imagine. A Mind Map is a tool to freedom the mind and gets ideas out of the brain. This method is highly effective to collect information and find a natural organizational structure that leads from the centre to outgoing lines. “The Mind Map is the external mirror of your own radiant or natural thinking facilitated by a powerful graphic process, which provides the universal key to unlock the dynamic potential of the brain” (mindmapping.com 2016).

After collecting all ideas we ordered them to some areas. *FIGURE 12* helps to visualize the process of ideation.

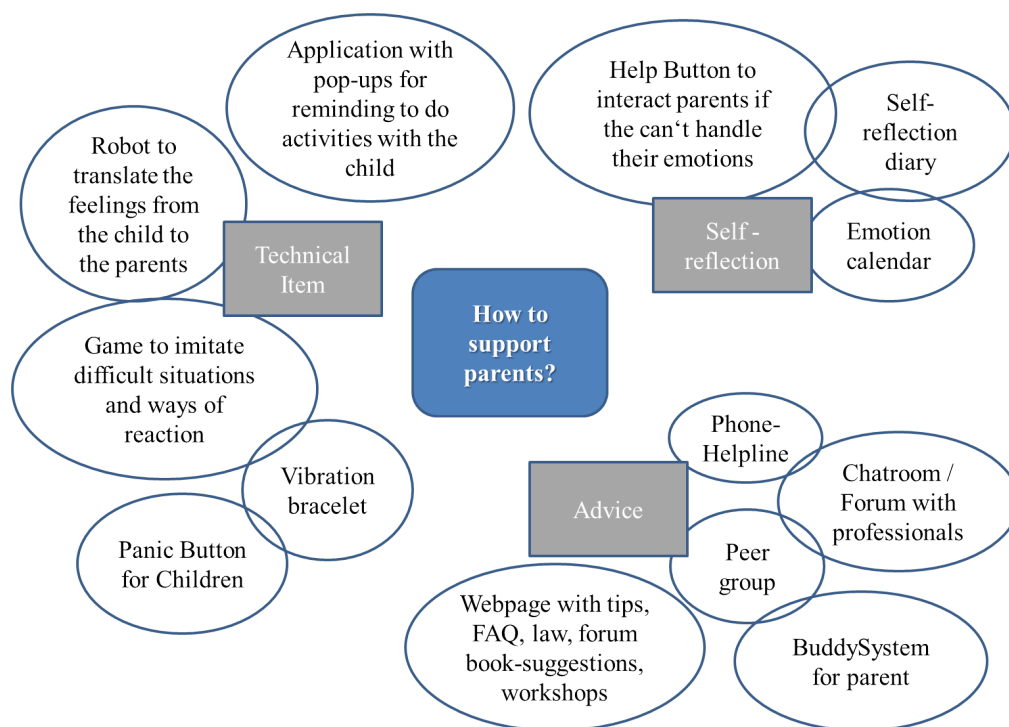


FIGURE 12: Mind Map – searching for solution

After this process we researched the competitors and the possibilities of each solution. Because of the technical challenge we crossed the robot, the vibration bracelet and the game. In Finland there is already a national helpline-number, plenty of webpages and also some chatrooms and forums where parents can change their experiences and their

advices. During the interviews with parents we found out that in Finland peer groups and a buddy system would only be successful if they are for a certain target group such as parents with children who have special needs. We researched also the applications that are already available. Jenni and I found out that all apps that are successful are free for download and there are some apps for babies, toddlers, teens, but not for all of them. We were thinking: What if parents have more than one child in different ages? We also found out that there are already help-buttons but only for emergency such as calling the police, but not with fun functions. There are also some applications for using as a diary or calendar but without any other possibilities.

Concurrent we did an online survey to ask parents about their need in challenging everyday situations. As *APPENDIX 3* you can find the questionnaire where we got feedback from 9 parents, mixed male and female including all answers. The survey was sent on Facebook with the request to help our student project. The parents could define their problem but haven't had a clear idea what could help them, except of money and time.

We concentrated on the research and focused on problems from the survey and we finally decided that we are interested in three functions. We compared this three step model, as *FIGURE 13* shows, in an application called ParentBox. "Keeping the inner balance", "trying not to get angry" and "always being a good example" were some of the statements from parents who lead us to the first function of the product – the Help Button. The next step, My Feelings – Calendar, was a suggestion of the organisation Nuorten Ystävät for visualizing the feelings. In this part we wanted to have some pop-up self-confidence advices once a day to strengthen parents work. The last function is a Tips / Tool – Box where we concentrate on every age of the child.

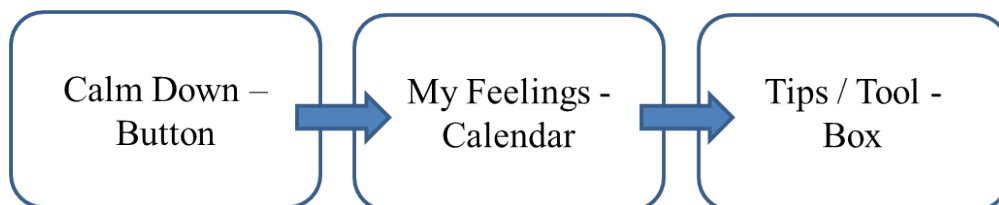


FIGURE 13: First version of the application-functions

The unique idea on this application is that the app will include all three functions which are interconnected. They work without personalizing but the option exists. There is also a statistic page for professionals to save time for documentation and for parents to visualize their feelings over a longer time. Each function has a couple of sub-functions as it is shown at the Demo-Path, *FIGURE 14*:

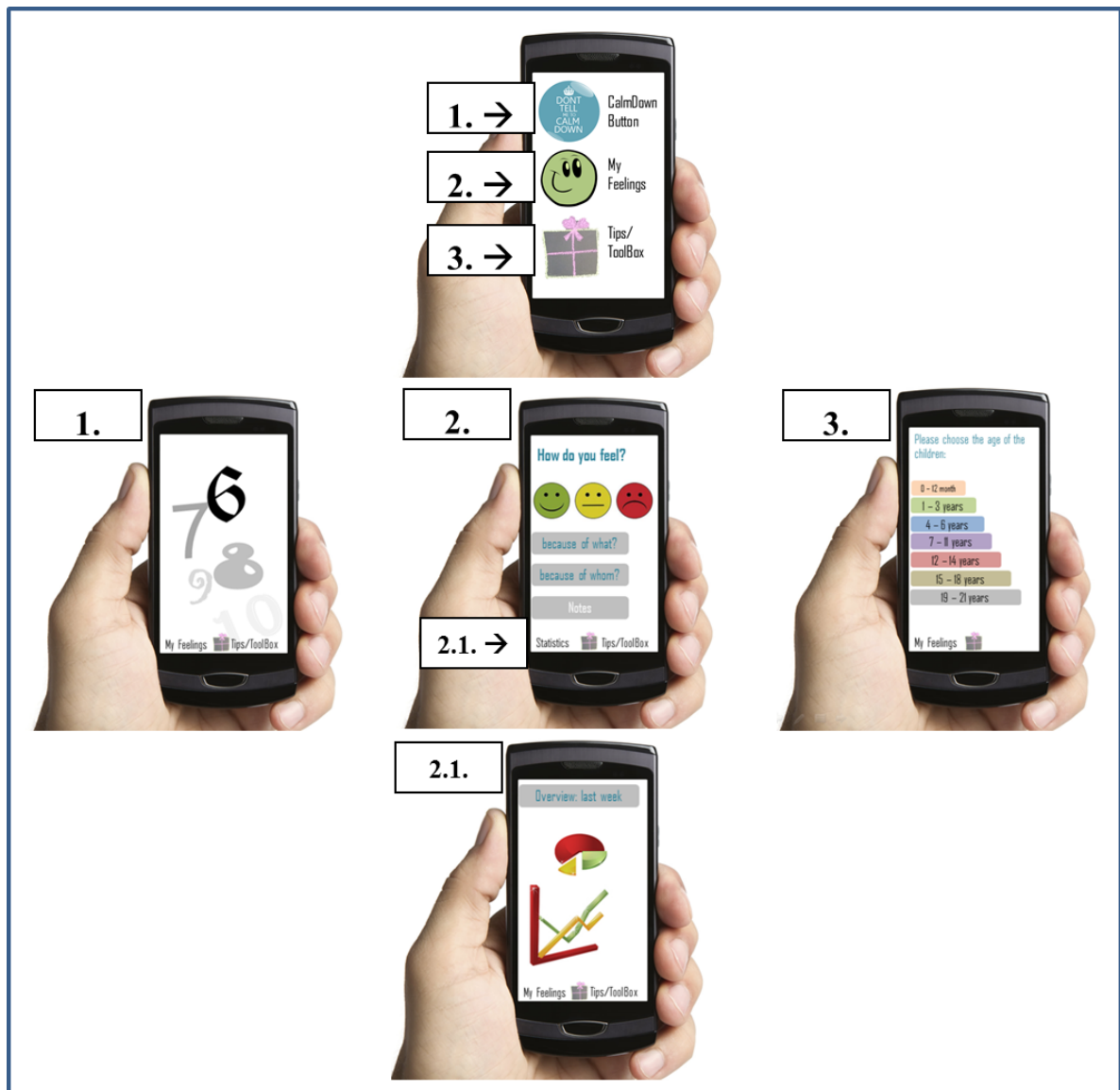


FIGURE 14: Demo – Gate 2: 7.10.2015

After Gate1 we had another three weeks to create the demo. To proof the potential of this demo we presented the solution including a business and marketing idea to another jury at Gate2 presentation in a different campus called Kotkantie. Gate 2 was an open space where students and professions could come to listen to our presentation. In the

auditorium we had a table to show passing and interested people our demo-version. During a 3 minutes elevator pitch Jenni and I had to catch the audiences' attention to explain afterwards details about the product. An elevator pitch should include all important facts about the product, service, project or solution in a short time. The goal is to catch the interest of the audience. (O'Leary 2008: 4.) The presentation and the elevator pitch can be found in *APPENDIX 4 and 5*.

ParentBox was one of four solutions who were chosen to continue, two new team members joined our team: Magda, student from Poland studying Occupational Therapy and Dong, student from China studying Business Information Technology.

5.5 Forming the new team

After an evaluation talk with one of our coaches the new team was coming together and divided the different roles. For a better allocation we got introduced to the team role theory of R. Meredith Belbin. It is focused on a combination of self-discovery and the need of the team. All team members are taking different roles based on their characters and skills but share an equal status. (Belbin 2010: 2) Within a questionnaire it is possible to find out your personal team role. Based on that questionnaire, our own expectations and on the discussion within the team we defined each role. *FIGURE 15* shows the "organigram". I was taking the leading role and was also aware of the marketing and business part and the design of the product. Magda was working primary for the product solution but also was meeting customers and testing the product with parents. The main idea about this task dividing was that Magda and me were having the right for decisions each in one part but still are involved in small parts of the work from others. Dong was working for the business and marketing plan but also went to meetings with customers and users to present our product. Jenni had already experience in programming so she took this part, but also helped with the graphic design.

PROCESS – MANAGEMENT:	CHRISTINA
PROJECT – MANAGEMENT:	MAGDA
PROGRAMMING & GRAPHIC DESIGN:	JENNI
MARKETING & BUSINESS:	DONG

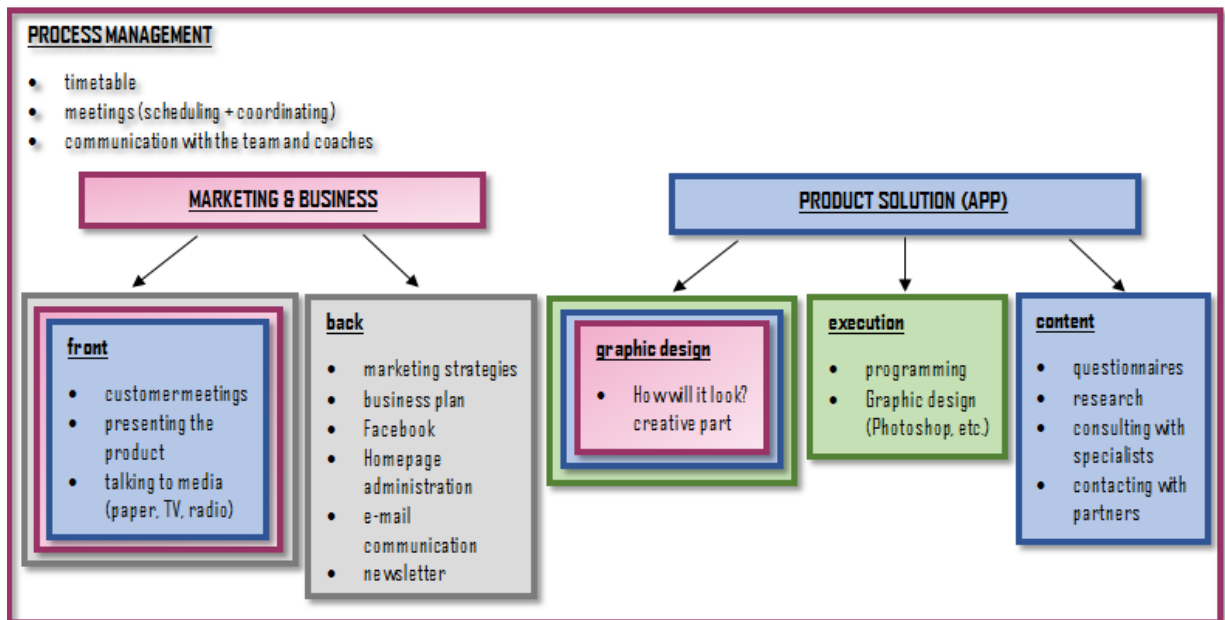


FIGURE 15: Team – Organigram (Project Plan 2015: 3)

5.6 Prototype

With the team of four we started the prototype process. During the prototype-period each area was defined more in detail. In this chapter each area will be described separately but it is important to mention, that all parts were happening at the same time.

5.6.1 Process Management

After deciding the roles we set the frame conditions of working together within rules, weekly meeting schedule, the used communication tools and risk management. All details can be found in the project plan as *APPENDIX 6*.

For the process management it was important to keep the overview of all areas as well as holding weekly team-meetings and setting the goals and the timetable. All process manager / leader from DevLAB and GameLAB projects were invited to meet weekly to learn more about the leading skills, the responsibility and difficulties. It was sort of a

peer-group where everyone could talk about their experience and challenges during the producing process.

5.6.2 Marketing & Business

Dong and I were working closely together to create a business and a marketing plan. We got support from different coaches to develop the business & marketing side of the product. We got introduced to the theory of lean canvas, created by Asha Maurya, that's influenced on the business model canvas from Alex Osterwalder. The lean canvas is a tool to create a quick business model without the resources of a full blown business plan. The benefit of the lean canvas is, that the business model get written down, that we might realize areas we didn't think about yet or might have problems and it helps to identify risks. (Whetton 2014.) *FIGURE 16* shows the lean canvas we were creating during this process. As *APPENDIX 7* you can find the whole business & marketing plan.

PROBLEM <i>List your top 1-3 problems.</i> Professionals are looking for a new tool to help parents with challenging everyday problems Organisations want to optimize their offer Organisations and professionals need support by their work to give the best help EXISTING ALTERNATIVES <i>List how these problems are solved today.</i> Challenging everyday problems are solved by parents themselves.	SOLUTION <i>Outline a possible solution for each problem.</i> Mood Diary for parents to document their daily feelings and problems Statistic for professionals to help with documentation and find out the problems more easily Timesaving tools to help faster KEY METRICS <i>List the key numbers that tell you how your business is doing.</i> By using the product professionals can save time and serve more clients The organisation is saving money because of the easy use of the application Parents and professionals can stay in contact easy – fast help	UNIQUE VALUE PROPOSITION <i>Single, clear, compelling message that states why you are different and worth paying attention.</i> The product is unique because it includes a three stage model where parents get fast help for handling their emotions, document them and receive professional help by an organisation or the toolbox who is also shown up at the application. The organisations can finally work together with parents by looking at their documentation. It saves time and money. HIGH-LEVEL CONCEPT <i>List your X for Y analogy e.g. YouTube = Flickr for videos.</i> Presence at Facebook, Homepage, Organisations, Parents	UNFAIR ADVANTAGE <i>Something that cannot easily be bought or copied.</i> There is no application for organisations. It is a three stage model, you only need one application for three functions and they are interconnected Connection between parents and professionals CHANNELS <i>List your path to customers (inbound or outbound).</i> Nuorthen Ystävät Health Care System in Finland Organisations who are working with parents to solve some clients in Finland	CUSTOMER SEGMENTS <i>List your target customers and users.</i> Users are professionals in organisations who are working together with parents Parents are using the application on daily bases to document their feelings while they are not together with the organisation The customer is the organisation (Nuorten Ystävät), they are buying our product EARLY ADOPTERS <i>List the characteristics of your ideal customers.</i> Interested organisations and their clients
COST STRUCTURE <i>List your fixed and variable costs.</i> Right now we are students working for free but to build up the working application we would need 3 professionals in IT. There is no calculation yet how much money we would need to keep the application up to date and build more functions over the time		REVENUE STREAMS <i>List your sources of revenue.</i> We sell the product to organisations and own for each user (professionals) 5€ a month. If we can find 100 users we get 500€ a month. Advertisement: for each 100 users (parents) we get 0,20€, additional to that for each click on the ad we own 0,40€. This market is only working with a lot of parents using our application		

FIGURE 16: Lean Canvas – Gate 3: 11.12.2015

During this process we were focusing on the strength of the product. To advertise the application we created a brand and a logo and parallel made up a three step plan where we created a webpage, started to be active on Facebook and introduced parents within the support of the organization Nuorten Ystävät to the previous product and invited them to be part of the development process by giving us suggestions during the programming process. Therefore we created an invitation letter that can be found as *APPENDIX 8*.

The brand and the logo are the signature of the product. It is important and should show the intention of the app, be easy to recall, nice to look at and useful for an app-item. Our team put a lot of effort in the name and the design such as getting supported by a professional from Poland and outsourcing the final graphic design to an external student from Finland. After the intense brainstorming and developing period we decided following name, story and logo: **TILIA – Parent Support Application**.



FIGURE 17: Final logo of TILIA – Parent Support Application

TILIA is the Latin word for linden tree (The free dictionary 2012). The logo, shown in *FIGURE 17*, illustrate a tree, the trunk is the family. The tree is grounded and it gives strength to families in difficult times. The leaves of the linden tree are looking like hearts – spreading love is one of our goals. Furthermore we choose TILIA because the linden tree is having a long story in history and literature. It was often used as center of the city and called holy or peace tree. In literature the tree was used as symbol for love, passion and offering a secure place to rest. (Kos 2011.)

The webpage <https://tiliaparentsupport.wordpress.com> and the Facebook page <https://www.facebook.com/tilia.parentsupport> show all important information in a

compact way. The product is introduced within all three functions and information about the story and our team can be found on that platforms.

Additional to the marketing part we created a financial plan where we concentrated on organizations as customer. As a group we decided to offer a pro-version of the application with special features such as a shared Mood Diary, where parents can share their Mood Diary with professionals, the possibility to add personalized tips and tools to their clients, and the statistic view that helps professionals to analyse the problems of parents easier and collect information without time consuming documentation. Through the pro-version and support of the government we want to afford the costs of building the application and also to get monthly money for updating.

5.6.3 Product Solution (App)

As already in chapter 5.4 described we decided to build up three functions for the application. In this chapter each function gets described in detail as well as supporting these with theoretical background.

CalmDown Button: Based on the interview with Nuorten Ystävät we know that parents experience negative emotions while raising children, such as stress, frustration, aggression, and guilt. Instead of keeping their negative emotions inside or hurting their children (verbally or physically), parents have a quick (one-tap-way) and easy way of letting go and becoming calm. There will be some functions like Yogic Breathing Technique, Countdown Technique 1-10 and the Bubble Wrap Game, parents can choose. Each of them have their special effects and are chosen carefully based on studies that have been proofed effects to calm you down in stressful situations. For example the Yogic Breathing Technique can reduce blood pressure and heart rate by 10 breaths/ minute. If music is included in this technique it has acute responses of the muscle sympathetic nerve activity. (Oneda, Ortega 2010.)

Must have: helpline number , Countdown, Breathing Yoga, Bubble Wrap Game

Nice to have: personalizing with happy memories, pictures and videos; funny mirror - distorting pictures, connection to music playlist such as YouTube or Spotify

Mood Diary: This feature is based on interviews and suggestions of Nuorten Ystävät. We assume that some parents don't realize the patterns/ behaviours leading to feel certain emotions. And in tough situations, they might tend to forget about positive sides of parenthood. This feature can help them to self-reflect, visualize the way they feel, notice the patterns, and eventually learn to manage their emotions better. It could help parents to visualize the patterns between their emotions and situations they encounter in order to help them manage them better. They can also share their Mood Diary with a professional (social worker, psychologist, occupational therapist) if they want to stay in touch with an organisation and get support when they feel overwhelmed.

Must have: specialist support, pop up reminders of nice things to do daily

Nice to have: letter to your future self, colors of emotion

Tips / Tools: Parents need specific, concrete tips from a trustworthy source that they can try when they feel helpless and frustrated. The tips and tools are based on practical experience of Nuorten Ystävät, as well as the pedagogic of Maria Montessori (Age of Montessori 2015) and Jan-Uwe Rogge (Rogge 2014). There is also the possibility of personalized tips from professionals if the parents are in contact with an organisation.

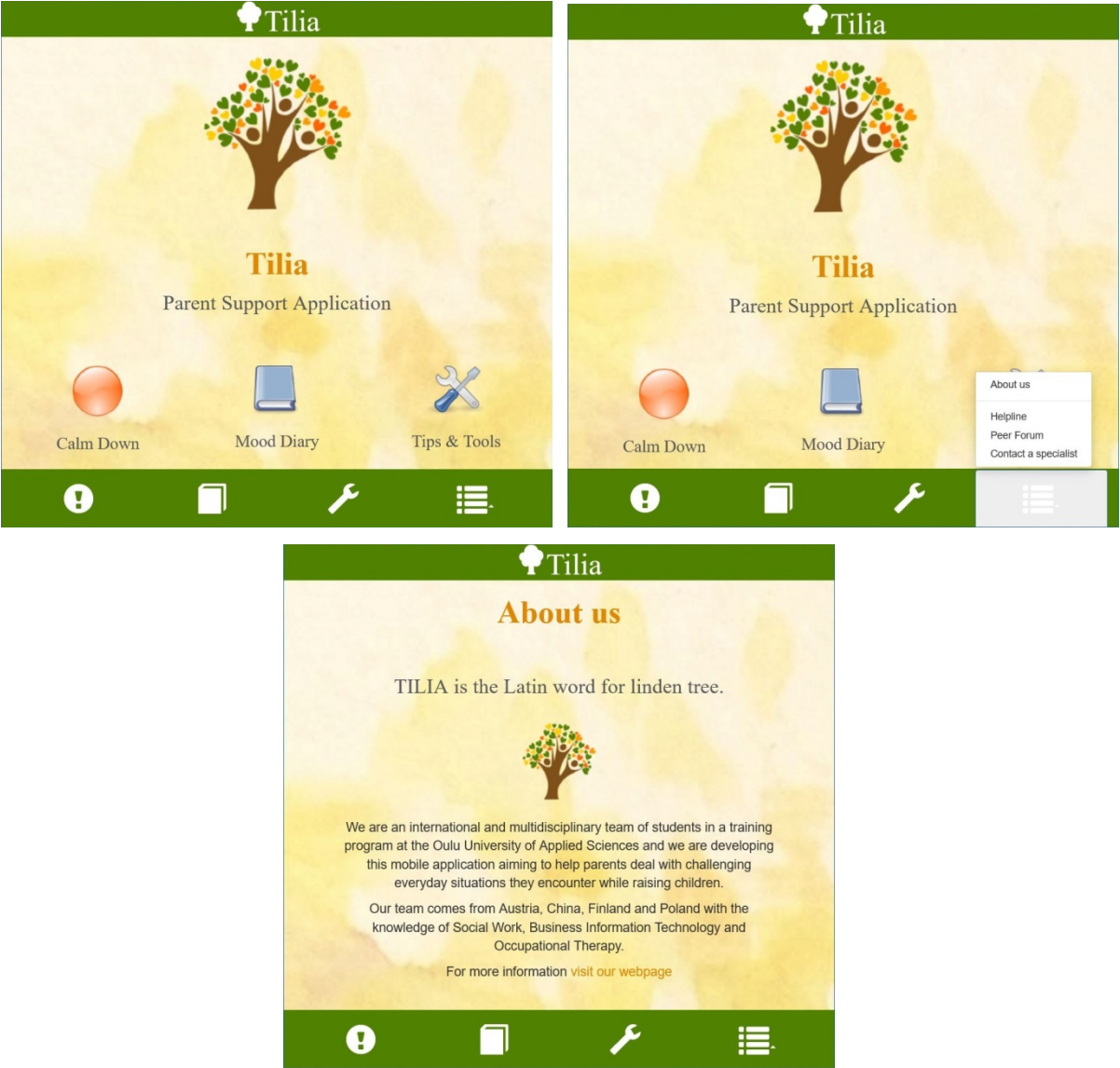
Must have: specialist support, peer forum

Nice to have: personalized tips

5.6.4 Execution

Jenni, the programmer, was working close together with Magda and me who were giving Jenni explicit tasks. During the whole software development process Jenni was supported by a programming coach if there were problems with programming some tools. The application-prototype is designed to use on mobile devices with android, with possibility to create it also for IOS and Windows Phone. Jenni used Apache Cordova Program for building it up. Following shows the final prototype from December 2015.

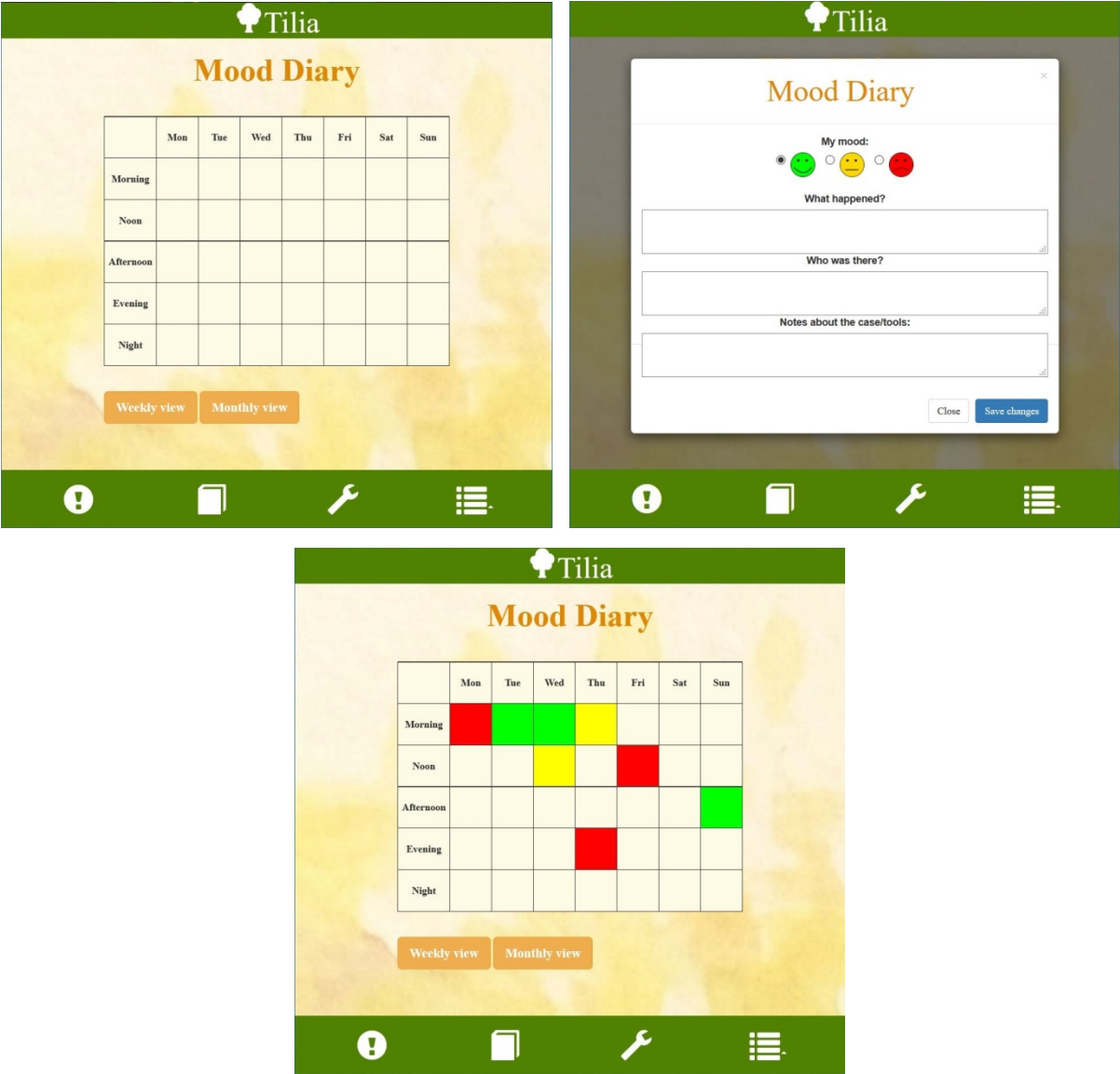
Main page including menu and “about us”



Calm Down Button including countdown and breathing yoga function



Mood Diary including pop-up function to add some specific information and used calendar with colours



Tips & Tools including personal tips for afternoon, kindergarten and going to sleep shown as pop up.



5.7 Test

The testing and prototyping mode is going hand in hand; it is related to each other. We had a group of 8 parents who gave us regular feedback to our prototype. They were also willing to meet us face to face but because of lack of time we couldn't meet them before Gate 3. We invited the parents through e-mail contact to send us suggestions about the design, the user friendly execution and the changes we could make. Within these feedbacks we changed the menu button from the top to the bottom and the view of the calendar so that parents could switch between monthly and weekly view. Also within two meetings with Nuorten Ystävät we got some suggestions and developed the product. Especially the subdivision of the Tips/ Tools changed from choosing the age of the child to a few umbrella terms such as Baby, Toddler, Youth and Personalized Tips.

6 RESULT AND CONCLUSION

The goal of the product was to create a tool to support parents with their daily challenges by raising their kids and also to stay in contact with professionals. Based on research we found out the need of parents and organisations and created a three step model produced as a mobile application. To create a user friendly and appealing product we stayed in contact with one organisation, called Nuorten Ystävät and some parents for the whole process. During the process of development we found out the weakness and the strengths of the mobile application and made some changes. Based on this experience while developing the mobile application I suggest that parents like to be involved by producing a product for them. They are willing to spend their time by meeting us as producer and give suggestions to improve the product. Problem in this part was only the restricted time we had during the prototyping process. Even the language border was not seen as a problem because we kept the option of meeting our Finnish team member but no one used this possibility. Also the organisation and their social worker were eager to be part of ideate and development process. They spent a lot of time to support us with the work, gave us literature and tried to give us an idea how their working routine looks like so we can find a way to help them with their work as well. This shows that it is important to let social worker and different professions be part of a development process, especial if the product is for them. It can be helpful for all areas of the practice. Not only in the context the need of social worker is shown, also in creating the business and marketing plan and the programing professionals can help to understand the need of the end-users.

My personal learning goal was to experience teamwork with different professions as a future social worker. Therefore I was part of a team from the beginning of the process and after Gate 2 chosen to take the leading role of the team. Because there have been ups and downs it was very useful to work in an interdisciplinary team and see all the resources such a constellation is offering. Especially the cultural difference could be seen during my work with Dong, who comes from China. I had the feeling that she didn't feel comfortable to talk to me if she didn't understand all the tasks because I was defined as a leader. She always asked Magda and Jenni if she was unsecure. It felt like

she was scared about me even if I didn't want to give that feeling. Of course this is a subjective opinion and maybe there were other issues that I don't know.

Within the leading coaching I learned new methods how to divide tasks and delegate the work. This was not always easy as we were only a team of four and in difficult times the whole team was affected by problems. I was able to try out some tools to build up a good working team but I had very often the feeling that I failed. Even if it doesn't feel good when you fail it is part of the learning process and it keeps you in motion so you start to learn more about yourself and the system. It is hard but necessary that the team is certain and positive about the product. The point of view has to be clear the whole time. It is always easier to be part of a team and define the things the leader is doing wrong than making it better. In my opinion I learned a lot of useful and important things for my future work as a professional but I am still not sure if I have the right character for leading a team to be successful.

As a developer I had the chance to sneak into programming and communication knowledge and had some lessons about creativity and start-up processes. Most of all I was working with the business and the marketing plan and I can say that this is one part that should be outsourced. It shows how important professionals from different parts are in the development process. Same as social worker can't be represented by any other professionals also business and marketing experts are needed. As the business and marketing plan shows, this was the weakness part of the product. Also the financial idea was not qualified. Afterwards, I can see that the team is made like a puzzle where every part is needed, with their own qualification, and is missing if not. This dilemma also helped me to understand that you should identify the weakness early enough and not be too proud to ask for assistance or support – fail early, fail cheap.

Within Gate 1, 2 and 3, supported by some specific lectures, I learned a lot about presenting and pitching a product in an individual and interesting way. During watching your own presentation it is important to analyse your body language and concentrate on the way you act. I have the feeling that I am much more confident during a presentation and I also gathered some information about how to build up an elevator pitch. It is more difficult to put all important and interesting information in a short time so you can catch the attention of the audience, but this is one of the most significant skills I learned for

my future work life. Not only when you sell products it can be useful but also in a job interview or during fundraising and project management it can be substantial.

During the whole development process I also recognized that communication can be tricky but is an essential part of a successful teamwork. Even if there are no words used, people still interact with each other and sometimes it is challenging, especial if there are problems coming up. For communication in teams I got to know some different ICT tools that were very useful. For example our team was working with Trello – a project organisation tool, based on the Kanban Board method. With this we started in the old fashion way, with post-it, but the team decided to try out the online version of it. Within this I also learned that it is very important to know what the team members need in certain parts of the process and try to find the common denominator.

Another personal goal was to find out how ICT can be created as a working tool for social work and how social worker can be an active and useful part of the development process. I think I was able to see, feel and struggle with the project process because I have been part of it. As a social worker I could use my skills within the teamwork but also for the cooperation with the organisation and helped with the understanding of the need. I had a little bit knowledge about that field, because I was working in a women shelter in Austria for a couple of years and this helped me also to understand parents in challenging situations. Also the way to get in contact with parents and social worker from Nuorten Ystävät was important to be part of. I suggest that in development process every profession is needed, especial this profession where the tool is made for. I think this is a lack in the ICT industry. But also professionals from health and social care are curious about Information and Communication Technologies for their work. I think Social worker have to understand that ICT is a big part in peoples and societies life and we need to be open minded for that possibility. Even if it is necessary and important to help clients face by face in the future there will be a lot interactive communication used with technology. Social Workers need to keep up with the time to work efficient, resourceful and profitable. But it is also important to see ICT as a new chance, opening new doors but not replace the traditional and well-tried social work. Society changes, people change, social work has acclimatise their work, methods and tools as well.

I think that it is obvious those social workers are using ICT in their private daily life as well, so why not make these tools useful for work?

7 DISCUSSION

During the whole semester, even if we got an introduction to the method of Design Thinking it still seemed for me, there was no structure, no system for the development process. During writing this paper and especially while I organized all my material I suddenly could see the idea, the different modes and steps we were making as a team and it started to make sense. I picture now the LAB Studio Model with different eyes – there is a lot of research and thinking behind. Sometimes when you are as a student in some lectures you start to get easy bored or at least loose some interest and even if I sometimes had the feeling no one knew what we were supposed to do I was always motivated. Maybe this was the motor of my motivation. It might not have made that much fun if I would have looked through the exact steps which were forward us. I think it didn't feel like there are so many theoretical methods behind and that was a positive experience for me.

Another effect of the LAB Studio Model was that teachers act in the role of coaches. For me this was a new way of study and I think sometimes it is still unfamiliar to me. But I totally support this equality between teacher and student cause in my experience the learning effect was higher. Sometimes I wished that the coaches just tell me what was the right thing to do, which decision we should make, what direction we need to go with the project but they just asked question to push our self through our individual way. This was frustrating, interesting, annoying, challenging, helpful and very efficient. Sure I failed a lot, but I always had the chance to try some other methods. If I reflect the development of my team members, the DevLAB participants and myself, I feel that some people, including me, unfurled and gathered more self-confidence.

About the product I would say that it was just too less time to prepare our self for the presentations in Gate 1-3. I also think that it was not enough time to get in touch with the parents to develop our product more efficient. I felt a little bit guilty to use time from Nuorten Ystävät and parents within the knowledge that it is unsecure if the project will continue after the semester. Sometimes it degrades the motivation of the team and it was challenging to keep it up by myself in difficult times. For me it was hard to believe

that the product will have a future because we were all international students, who left Oulu before Christmas. Next to these worries I also had ethical problems by choosing the pedagogues of the tips and tools. I was always struggling with myself by giving advice to parents but I don't have children by myself and I didn't feel like an expert in that field. Raising a child is a responsible function and there are so many different upbringing methods that I would not claim which way is the right one. It starts with breast feeding, baby food, sleeping habits and so on and everyone does it a little bit different and that is a good thing. Even when Nuorten Ystävät told me that some parents need clear advice I never really felt comfortable with this responsibility.

Based on the interaction between ICT and Social Work I have to say that I am positive surprised. I would call me myself as an ICT critical person and I was not a big fan of the main idea to let ICT be an essential part of Social Work. During the process I recognized that technology is already part of this profession field, at least it is part of the client's life. Information and Communication Technology sounds scary for me and I thought it will destroy the personal contact to people, it makes lonely and it is dangerous. To be honest I still think that personal contact is the best way for communication but sometimes it is not possible and in that case ICT is a great way to stay in contact. It should be seen as a chance for new opportunities and I have to remind myself also, to stay open minded. But I don't want to lose my critical view so that I am sitting between the chairs and for me that is the task for social worker. As a future professional I think we should not follow every trend but stay open minded for new technologies to know what's going on in our client's life.

It is also important to reflect and think about the data base when we use ICT together with clients. This was also a current topic where our team had some discussions about but didn't find an answer. For me, this is one of the biggest deficit ICT shows.

In the end I am proud of what our team was able to do in such a short time and I will always look back to my experience and my time in DevLAB with joy

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9 APPENDICES

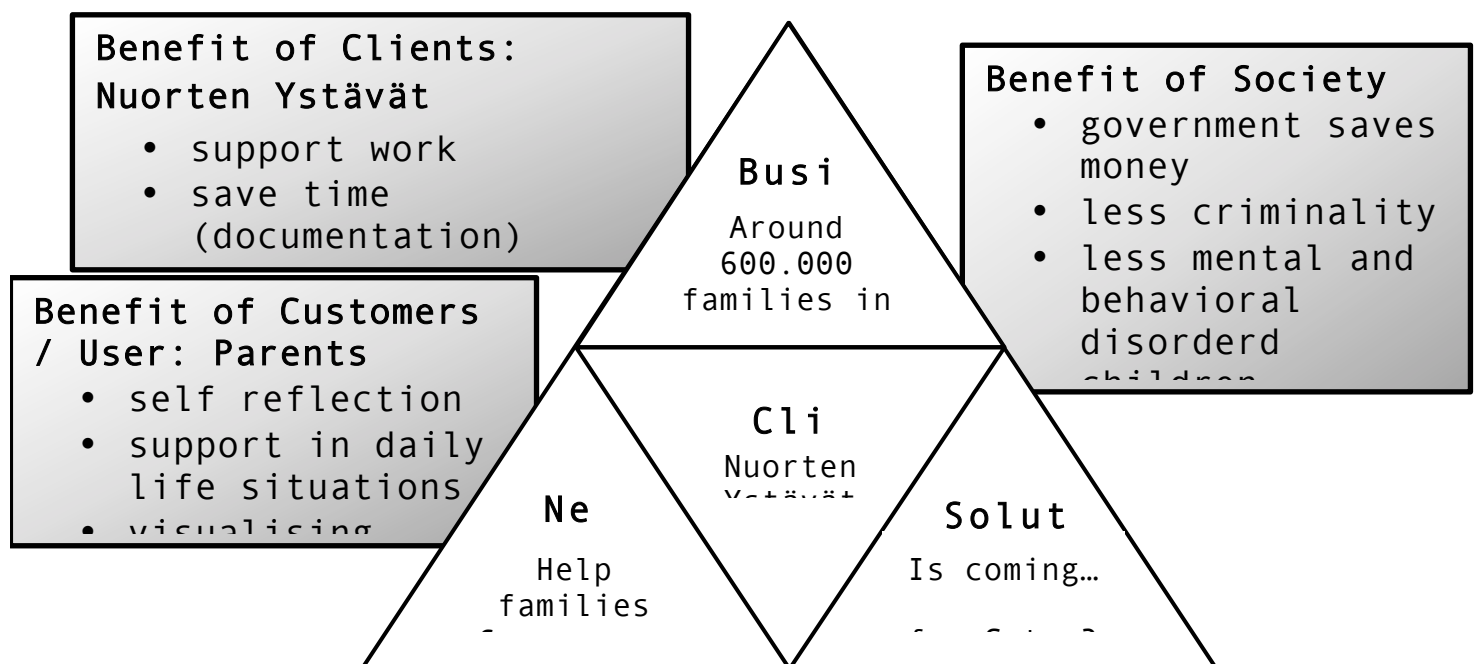
Parenthood Support Solution



Challenging situation by raising kids can be frustrating and stressful.
But every family is affected of them!
Children are our future!

There is need for support, because...

- ... helping children with **mental and behavioural problems** in Finland costs **33.5 million euros** a year.
- ... the cost of preventive work is only **3.000 €** per child a year. If preventive work fails and the child has to be **taken into custody**, the costs will rise up to **18.000 -72.000 €** per year.
- ... the number of **children placed outside the home** is **constantly rising** but the number of families in Finland is since 1992 almost the same.
- ... Children's **placing outside the family** costs **620 million euros** a year and it is getting 50 million euros more every year.



BACK TO THE FUTURE...

Possible Solution:

- Panic Button
- Diary

Next Steps:

- visiting Nuorten Ystävät during work
- visiting school for challenging children

Parenthood Support Solution

Jenni Pussinen



Christina Perka

Problem

Challenging situation can be frustrating and stressful.
But every family is affected of them!
Children are our future!



Need of Family Support

Help with challenging every day situations:

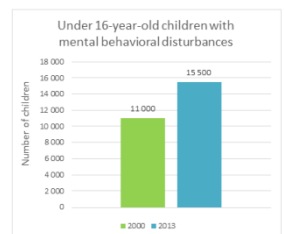
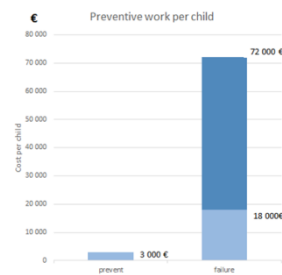
- setting up rules
- taking a parenting role
- controlling emotions
 - frustration
 - stress
 - helplessness
 - aggression



→ This affects every family!

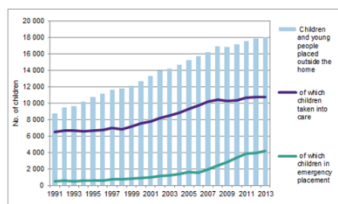
The number of children with mental and behavioral problems is rising alarmingly:

33.5 million euros a year

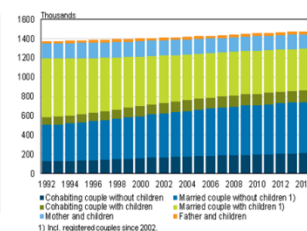


- ← cost of preventive work: 3,000 €
- ← taking children into custody: 18,000 – 72,000 €

The number of children placed outside the home is rising...



...but the number of families in Finland is still almost the same.



Children's placing outside the family costs 620 million euros a year.

50 million euros more every year

Possible Solution



Kiitos for listening!



1. Gender

Number of respondents: 9

8 women

1 man

We are students from Finland and Austria and are working on a project to support parents with challenging everyday situations. We would be very thankful if you take 3 minutes of your time to fill out our questionnaire.

2. Age

Number of respondents: 9

- 40
- 49
- 30
- 25
- 38
- 32
- 40
- 38
- 36

3. Marital Status

Number of respondents: 9

4. Children

Number of respondents: 9

	0	1	2	3	4	5	Total	Average
How many children do you have?	0	3	4	1	1	0	9	2
How many children live with you?	0	4	3	1	1	0	9	1.89
Total	0	7	7	2	2	0	18	1.94

5. Age of Children

Number of respondents: 9

- 12 and 9
- 17
- 3
- 4,5v ja 2kk
- 7 & 9

- 13, 11, 8, 4
- 2 + 19
- 7, 11, 13
- 2

6. What challenging everyday situations do you face regularly by raising the children?

Number of respondents: 9

- Eating well and regulary
- Don't have time for makeing home made food.
- Time. School, daycare, work, reading etc..
- asioiden suunnittelu ja toteutuminen aikataulussa, jatkuvat muuttujat. Rutiinin omainen arki. Ajan puute.
- Constant complaining about irrelevant (in my opinion) things, general desobedience and forgetfulness (most probably because the things that should be remembered are not interesting enough), constant arguments between the children.
- Getting help around house, gettin childern to do what asked
- Keeping the home tidy + clean
Paying high fees for nursery
No close family to help out look after my child
- 1. homework -my eldest one is reluctant to do it
2. Children arguing with each other
- Public transport
Trying to be organised in the evenings to get housework etc done - when all I want to do is spend time with my partner
Keeping my son occupied while I'm cooking, without having TV on.

7. What challenging situations do you face rarely but sometimes by raising the children?

Number of respondents: 9

- Not to get angry
- To get them understand that adults are most of the time right.
- none
- Rajojen pitäminen, riitatilanteet. Tilanteen näkeminen lapsen näkökulmasta.
- When you really get pissed off by a kid that continues with some really stupid whining / complaining / argument (after you explaining several times why the argument is not valid and trying to steer away from the whole conversation) and you really feel like strangling that little beast (which you can't do of course) and you have to try and keep your inner balance so that your child would not be traumatized... (that only happens with the one specially challenging child). So, the child nagging at you is really nerve consuming!
- Its always something, if its not one child its the other
- Not having time to have a shower in the morning
- children not sleeping when asked, they do go to bed but rather read for hours
Playing with their phone
- Tantrums

8. What is the hardest part by raising children?

Number of respondents: 9

- Finding time to spent with them...
- To be a good example.
- Keeping the rules.

- Lasten kasvattaminen ei ole vaikeaa vaan haastavaa. Arjen pyörittäminen, töiden ja harrastuksien sovittaminen ja yhteisen perheen ajan löytäminen. Sääntöjen ja rajojen asettaminen ja niiden noudattaminen ja vahtiminen.
- As a parent you feel constant guilt about almost everything. Not having enough time for your children, for example.
- Not being able to afford my own home
- You don't know all the answers and you learn as you go along making lots of mistakes
- not having enough time to spend with them
- Trying to maintain aspects of my previous life - doing everything at a mediocre level
Earning a living

9. What would you like to do better as a parent?

Number of respondents: 9

- I do my best.
- Believe in myself.
- More money.
- Olla ymmärtäväisempi ja kärsivällisempi ja löytää aikaa enemmän lapsille.
- Be more patient and wise.
- Have my own place
- Be outdoors more with my child in green open spaces
- spend more quality time with them
- Think of stimulating things to do with my son and avoid the tv

10. What kind of support would you need to feel subsidized?

Number of respondents: 9

- Don't know the last word....
- Love and understanding from my child
- Subsidized???
- Ystävällisyyttä joista löytyisi niin itselle kuin lapsille seuraa.
- When my own wisdom fails and I get no results...
- Housing assistance
- Support of another person around
Child friendly spaces to roam
- -
- I don't know

ParentBox



Jenni Pussinen, Christina Perka

Overview

- Problem / Need
- Solution – Demo
- Business

Problems

Challenging situations for parents by raising children can be frustrating and stressful.



Research - Questionnaires

What challenges are parents facing by raising a child?

„Keeping the rules“
 „Constant complaining about irrelevant (in my opinion) things“
 „Children arguing with each other“
 „To get them understand that adults are most of the time right“

„As a parent you feel constant guilt about almost everything. Not having enough time for your children“

„Not to get angry“
 „Keep your inner balance“
 „To be a good example“

„You don't know all the answers and you learn as you go along making lots of mistakes“

„It's always something, if it's not one child, it's the other“

Need of Family Support

Help with challenging every day situations:

- setting up rules
- self-confidence
- managing emotions
 - frustration
 - stress
 - helplessness
 - aggression



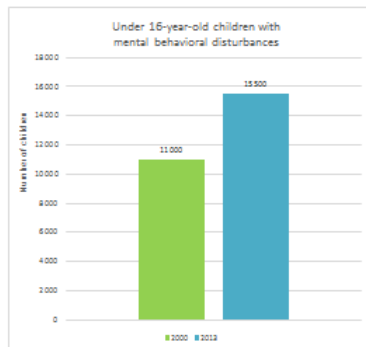
→ This affects every family!

WHY
do we need to support parents?



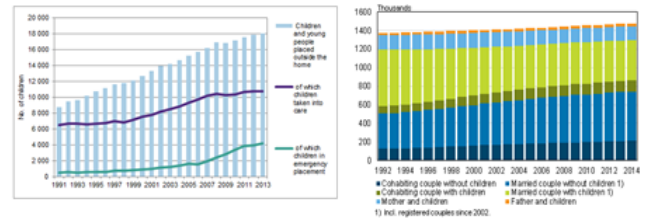
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33.5 million euros a year



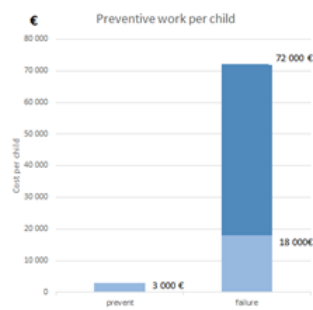
The number of children placed outside the home is rising...

...but the number of families in Finland is still almost the same.



Children's placing outside the family costs 620 million euros a year.

50 million euros more every year



- cost of preventive work: 3.000 €
- taking children into custody: 18.000 – 72.000 €

1 Application / 3 Functions

CalmDown-Button

My Feelings

Tips/ToolBox

Demo



- All functions are interconnected
- App is working without personalizing - but you can do that

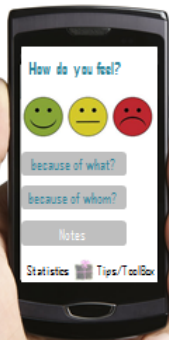
CalmDown-Button



Different Features:

- Countdown
- Games
- Music
- Pictures
- Advice

My Feelings



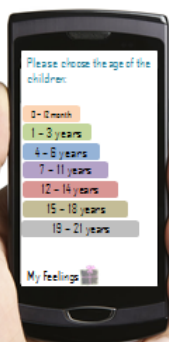
- 3 emotions – keep it simple
- Names can be added
- Notes can be made

Statistics



- Visualising
- Self Reflection
- Professionals can use for documentation

Tips/ToolBox



- Categories by age
- Tips and ToolBox will be made together with professionals

Benefits

- **Clients:**
 - **Organisations**
 - support work
 - save time (documentation)
 - serve more families with big problems
 - employees are less stressed
 - **Government**
 - government saves money
 - less mental and behavioral disorders children
 - less violence against children
 - **Companies**
 - advertisements
- **Customers / User:**
 - **Parents**
 - self reflection
 - support in daily life situations
 - visualising problems
 - parents are less stressed

Business-Plan



→ Application is free for parents...



...but there are three potential models of selling the ParentBox - Application!



Business-Plan

1. Government pays for the application to put it into Maternity Package and Public Health Services
2. Organisations buy Pro-Version of the application to support their work
3. Pop-Up advertising of different companies



Marketing

- Maternity Package
 - 40.000 packages a year (95% of first time parents)
- Public Health Services
 - before school
 - after school
- Organisations
 - Nysortan Ystävät
 - Tampere Parents' Association
- Companies
- Social Media



Competitors

- Applications
 - Tips for baby care
 - Positive parenting
 - Moodmeasure in general



Potential Future

- Different Countries - global problem
 - More parents need support in parenthood
 - Need of more tools for preventive work
- Customization for different users
 - Teenager with behavior problems (high risk for crimes)
 - Employees
 - Sportclubs
 - Schools
 - ...



Kiitos for listening!



Hello, my name is Christina Perka, I study social work and my project partner is Jenni [REDACTED] and she is studying Business Information Technology

And we are introducing now our project PARENT BOX.

Do you have children?

Do you know how parents feel sometimes? Or can you imagine that they can feel frustrated, helpless and stressed?

We made a research about these questions and got answers like:

“It’s always something, if it’s not the one child, it’s the other.”

“As a parent you feel constant guilt about almost everything. Not having enough time for your children for example.”

“You don’t know all the answers and you learn as you go along making lots of mistakes.”

So we realized that parents are facing a lot of challenging everyday situations.

Every family is affected of them.

We want to support families and help them, that challenging everyday situations don’t turn into bigger problems.

So we are making an application with 3 functions that is used by the parents. It includes a CalmDown-Button, a My Feeling – Diary and a ToolBox with Tips.

- The CalmDown Button is used at the moment when parents feel frustrated and helpless, where they need time and interaction to keep their inner balance. You can choose from different features like Music, Pictures, Countdown or even Games.
- At the My Feelings Diary you can document your daily feelings and also the feelings when you use the CalmDown-Button. It has three emotions, some options to tell why and because of whom and get the right Tips and advices.
- The third part of ParentBox-Application is the ToolBox where there are Tips available and also some tools and methods. So parents can try out some new techniques to avoid these situations next time.

One of the main parts of the application is that all functions are interconnected.

Also you don’t have to privatize it, if you don’t want to. But of course there will be this option that you can do that.

But how can we make a business with ParentBox?

The application is free for parents, but we want to be part of the finish Maternity package paid by the government.

We will also build a pro-version of the application for organisations, which could use it to support the work of their professionals.

And then we are offering pop-up advertising for companies.

Thank you for your attention.

Frame Conditions

Rules

Morning arriving: 30 minutes before meeting so everyone can get coffee/tee and meetings are starting on time.

Team-Meeting rule: no smartphones, tablets, etc.

Dates

Weekly Janne - all hands meeting: Monday, 10:00 - 11:00 / 11:00 - 12:00 (meeting shows in DevLAB calendar)

Weekly Team Meeting: Monday, after Janne (11:00 - 12:00 / 12:00 - 13:00)

Weekly Coaching: Wednesday, 9:00 - 10:00

Weekly Leader Coaching (Christina): Monday, 14:00 - 16:00

Communication tools

Fast Messages: Facebook Messenger

Meetings (not face-to-face): Skype

Material Sharing: Google Drive

Risk Management

Transparence at work - putting all documents on Google Drive so everyone has access, especial when someone is sick

Conflict communication - talking if something is not feeling good

Sickness - Christina is assigning tasks

Asking for help if needed - in the team or from coaches

Ressources / Roles

Christina - Social Work, International Development

Magda - Occupational Therapy

Jenni - Business Information Technology

Dong - Business Information Technology

PROCESS – MANAGEMENT: CHRISTINA

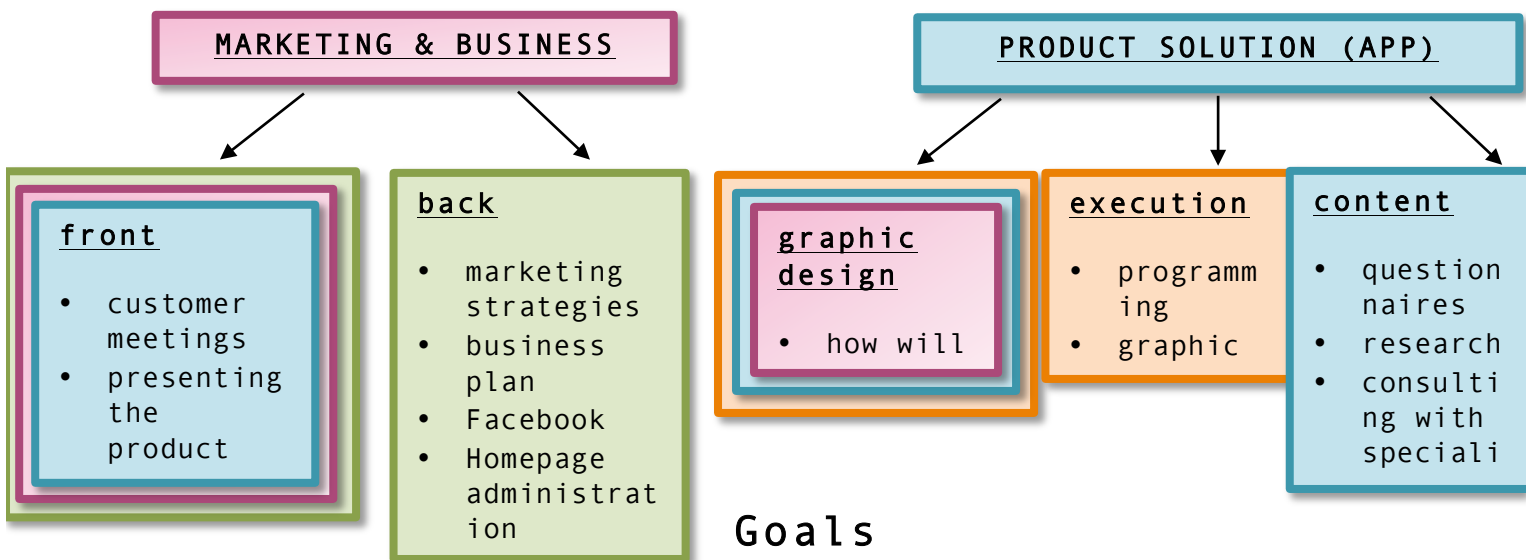
PROJECT – MANAGEMENT: MAGDA

PROGRAMMING & GRAPHIC DESIGN: JENNI

MARKETING & BUSINESS: DONG

PROCESS MANAGEMENT

- timetable
- meetings (scheduling + coordinating)
- communication with the team and coaches



We will defined the product, the 3 “must haves” and the 5-7 “nice to have” at the end of Week 44.

Goals for Week 44:

- Logo/Slogan
- Meeting with Nyorten Ystävät
- Questionnaires for parents
- Setting up e-mail address with signature
- Coaching with Jouni
- defined the product

Next Steps

Marketing & Business

- Research – western countries / Asian countries
- different business plans based on the research
- Slogan for Logo and Brand
- Webpage with different languages
- newsletter for advertisement
- Facebook page
- video about the product for youtube

Product content

- meeting with Nortyn Ystävät
- questionnaires for parents
- potential new partners/ customers
- survey for different people, target groups, countries
- defined product

Graphic Design

- Logo / Brand
- layout
- Pictures, icons

Execution

- Research – programs (Apache Cordora)
- learn programs – following tutorials
- Build up the application – programming

Process Management

- setting up e-mail address
- making appointment with Nyorten Ystävät
- making appointment with Jouni for coaching
- project plan
- project management
- setting up Kanban Board
- Timetable
- organizing team-meetings

Business Plan

<TILIA-Parent Support Application>

1. Introduction

Our project named ParentSupport, the purpose of ParentSupport is to support parents in daily situations. Parents are our target customers. We are making an application with 3 functions that is used by the parents. It includes Calmdown Button, Mood Diary and ToolBox.

The application is free for parents, but we want to be part of the Finnish Maternity package paid by the government. We will also build a pro-version of the application for organizations, which could use it to support the work of their professionals. And then we are offering pop up advertising for companies.

2. Executive Summary

We are working in DevLAB, our project is to develop solution that support parents in everyday situations by raising their children. It is an application who has three functions to help parents by recognizing their feelings, document them and giving some tips to avoid problems the next time. Additional to that we will make the website for our product.

The Ownership is belong to our team. Parents are our main target market.

Our marketing proposition is divided into online and offline.

First we will launch our product in Finland, because we are study and live in Finland and their is a huge need for this application. Also we have some partner organisations who are cooperating with us. Collecting the feedbacks from the parents and specialists, improving the product, then selling into overseas.

3. Mission, Strategies, etc.

Vision

Parent Support application's vision is to be a friend with parents. When parents feel angry or frustrated, a friend will give you the advice and make you relax. We will earn customers' trust from our value content, and following by offering the high quality update, functions and services. All free for parents.

Mission

Our mission is to support parents by their great work they are doing by raising their children. It can also be challenging and we know out of research and surveys that there is a huge need for support. Parents are a big target group and everyone is facing difficult situations from time to time. We believe in our product, it helps parents to focus on their own behaviour and prevent big problems by using different kind of tools. We make an application where

parents can come for free functions to make them calm down and services which will help them to solve the daily problems and daily stress.

Objectives/Goals

Parents are free to use our app, and we hope the government can support our work, to establish the health service. Connecting with the organizations, also pop up advertising of different companies.

Keys to Success

- High quality content. Our product will emphasize functions which is of the high quality to the target market.
- Multicultural. Our team has four members, and we are come from different countries. So it is useful when we face the different countries' parents.
- Reputation. Establishing a reputation as subject matter experts and providing high quality services and products is key to the success .
- Usability. Providing product and application parents want, parents can easily find what they are looking for.

4. SWOTs

Strengths:

- We are four people with different strengths including Occupational Therapy, Business Information Technology and Social Work. Team members are responsible for the different part, business members responsible for marketing and business area, IT members responsible for HTML, JAVA, Wordpress, etc.
- Experience and knowledge in the computer company.
- Different languages in our team such as Finnish, Polish, German and Chinese, we can setting our application in the different languages.

Weaknesses:

- Funding is limited for this startup
- lack of business experience

Opportunities

- New features and functions on our product.
- Attractive outlook of our product.
- Benefit in helping the kids
- Prevention
- Possibility to expand our product

Threats:

- Some similar apps already have
- New start-up product

Strategies

- Meeting with N.Y., showing our project idea.

- Introducing our demo product in the parent meeting, if the parent interested, they can contact us by email or meeting.
- Collecting the feedbacks from the parent after our parent meeting and developing our product
- Building the homepage on the website, and pop up ads on the internet.

5. Financial plan

- We have to focus on the profit we can get out of selling the application. For that we have to know the commercial value and sell the product at high prices in the future.
- It will cost around 60.000 € to build the application including server build, database updating and maintenance instructions. (these price is based on research)
- If the app business is good, there are prospects that can be considered about one million.

Calculations

For Start Up we would need around 10 organisations who are interested to buy our product. There are two possibilities to sell the product:

1. We offer a year-Package that costs 1.000€ and includes everything.
= 10.000€ for the first year.
 It means that the team who is building up the application is working almost for free but there is a little amount of money to use for motivation.
2. There would also be the possibility to get 10€ per month and per access for professional (Social Worker). If each organisation buys access for 15 professionals we could own 750€/month (15 professionals * 10€ = 150€ * 10 organisations = 1.500€).
= 18.000€ for the first year.
 The advantage in this version is that we get monthly money we could use to work with.

6. Product

The product includes:

- The Calmdown Button is used at the moment when parents feel frustrated and helpless, where they need time and interaction to keep their inner balance. You can choose from different features like Musics, Pictures, Countdown or even Games.
- Calmdown Button is displayed on the homepage and on the down of every page. With just one tap on it, this feature randomly selects a function that will calm you down and make you more relaxed. After one

function “ends”, you can choose a random selection again or go to choose a different feature of the app. It is available for logged and non-logged in users.

- Mood Diary you can document your daily feelings and also the feelings when you use the Calmdown Button. It has three emotions, some options to tell why and because of whom and get the right Tips and advices.
 - It is displayed on the menu bar on the down of every page. You have a weekly calendar, each day is split into four daytimes. In each part of the day, you can choose the emotions which were the dominant ones. To keep it simple, you can only choose from positive, neutral and negative(negative-red color, sad emotion , neutral-yellow, positive-green, smiley emotion). However, it is possible to make notes next to each choice, with a space for writing because of what/whom you felt certain emotion and also to specify what the emotion was. There is a possibility to show weekly/monthly stars or to share the notes/stts with a professional working with the family.
- ToolBox where there are Tips available and also some tools and methods from specialists or professional person. So parents can try out some new techniques to avoid these situations next time.
 - It is displayed on homepage and on the menu bar on the down of every page. It is a feature that helps parents with concrete, specific tips/methods how to handle difficult situation while raising children. It is divided into age sections and then into category sections, such as eating, sleeping, education, discipline. It can be used both with and without logging in. The advantage of logging in is the possibility to personalize the tips, according to information from mood diary and information provided while registering. The tips/methods suggested are designed with the help from professionals, as well as based on the literature and scientific research.

Environment

- Parents experience negative emotions while raising children, such as, stress, frustration, guilt, etc. Calmdown Button feature provides them with a healthy way to let go of these emotions and feel better. Instead of keeping their negative emotions inside or hurting their children , parents have a quick and easy way of letting go and becoming calm. There is a possibility of personalizing the feature, which allows you to get more functions and it is available after logging in.
- Some parents do not realize the patterns behaviours leading to feel certain emotions. And in tough situation, they tend to forget about positive sides of parenthood. Mood Diary helps them to self-reflect, visualize the way they feel, notice the patterns, and eventually learn to manage their emotions better. It helps parents to visualize the patterns between their emotions and situations they encounter in order to help them manage them better, They

can also share it with a professional and get support when they feel overwhelmed.

- Parents need specific , concrete tips from a trustworthy source that they can try when they feel helpless and frustrated. Tips are based on practical experience , as well as evidence-based findings, so the parents can trust them.

7. Future Growth Opportunities

- Expanding into Finland

Now we are study in Finland, and we have more chance to contact with the potential customers. And also we have a local Finnish member in our team, it can make us more convenient to communicate with Finnish companies.

- Launching into overseas

8. Marketing Plan

1. Marketing Analysis

There are have some applications related parenting guide, parenting tool, parenthood support, mood diary, and anger button, they are use for Apple and Android to download.

2. Customer Profile

The product targets different parents. Category by the age, and the problems. All parents can get relax from the calmdown button , and get the useful tips from the toolbox.

3. Strategies for reaching or exceeding your targeted sales levels

Our first method of gaining new customers will be through the meeting in N.Y. building. Second method to gain new customers is through the internet, pop up ads, homepage searching and our own media.

Also the promotional items such as posters, leaflets all with our product name and logo.

9. Online and free marketing

Facebook Page to make the product and the process public and get people interested

- Setting up Facebook Page
- Invite people to like page

We make the official webpage of our application, everyone can like our page. If people search the keyword about our application, it will show the related information below, also include our page. Our team members are administration person, we will upload the news about our application, introduction about our

team, etc. Also, when people scan the Facebook homepage they will find us facebook ads or page suggestions in the middle part or on the right side.

Setting up an **official website** of our product, it can be search on the Facebook.

- Setting up official website
- Get some text, pictures, information

Pop Up ads on the newsletter/ different webpage

- Newsletter to send it out to different organizations (target group)
- Pop up ad – design

10. Future online marketing – research about cost

Our product ads show on the YOUTUBE before the video start.

Pop-up ads on the different social media.

Search engine optimization.

Pop-up ads on e-mail accounts

11. Offline and free marketing

Fundraising on asking different target groups (hospitals, kindergarden, school, childrens doctors, newspapers, magazines, health care center, etc.) to put our information or ads into their **brochures**

- Introduction paper
- Design of ads
- Contact list
- Research about interesting possibilities

The known people use our product and **lead the trend**.

- Get people to know about our product

Directly to **crowded places or shopping malls** to sell our products.

- Research about rules in Stockmann to do that
- Leaflet with information to give it to people

12. Future offline marketing – research about cost

Making the contract with the organizations, and take the trial period, collect the feedbacks.

TV ads.

Invitation!!!

Come test our app!

Our project is to invent an application to help parents in challenging everyday situations by raising their children.

The application includes three main functions:

- **CalmDown Button** - helps to calm you down in stressful situations
- **Mood Diary** - allows you to record your feelings to reflect them afterwards
- **Tips/ToolBox** - learn new tools and methods

To provide the best result we want to develop the product while building up our prototype.

What to do in the focus group?

- give feedback through e-mail conversation about the use of our prototype
- meeting face to face to test the prototype and giving feedback

PLEASE CONTACT US IF YOU ARE INTERESTED!

Christina Perka

E-MAIL. [REDACTED]

Our Team

We are four students in a training program that's offered by the Oulu University of Applied Science

and we are developing a mobile application aiming to help parents deal with challenging everyday situations they encounter while raising children.

Our Team is multidisciplinary and from the fields of Social Work, Occupational Therapy and Business Information Technology.

EIEDESSTATTLICHE EKLÄRUNG

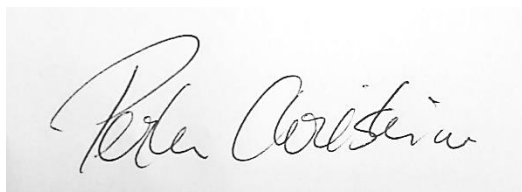
APPENDIX 9

Ich, Christina Perka, geboren am 06.08.1987 in Wiener Neustadt, erkläre,

1. dass ich diese Bachelorarbeit selbstständig verfasst, keine anderen als die angegebenen Quellen und Hilfsmittel benutzt und mich auch sonst keiner unerlaubten Hilfen bedient habe,
2. dass ich meine Bachelorarbeit bisher weder im In- noch im Ausland in irgendeiner Form als Prüfungsarbeit vorgelegt habe,

Weikersdorf, am 30. April 2016

Unterschrift:

A handwritten signature in black ink, appearing to read 'Perka Christina', written on a light-colored background.

